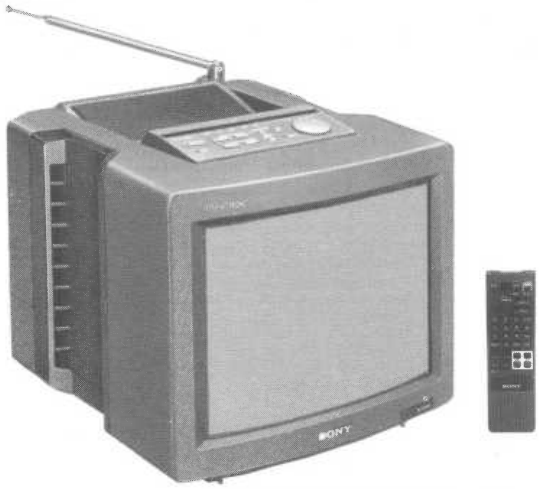
2713

KV-10FMR20
RM-768

SERVICE MANUAL

US Model

Chassis No. SCC-D20A-A



MEGA BASS

Note: The service manual for RM-768 has been issued separately.

MODELS OF THE SAME SERIES	
KV-10FMR20	

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF: 2–13 UHF: 14–69 CATV: 1–125 FM: 88–108 MHz
Picture tube	Trinitron tube 10-inch picture measured diagonally 11-inch picture tube measured diagonally 90 degree deflection angle.
Antenna terminal	Combined VHF/UHF/FM 75 ohms
Input	VIDEO: phono jack 1Vp-p, 75 ohms AUDIO: phono jack 500 mVrms (100% modulation), 47 kohms.
Output	Headphones jack (minijack)
Power requirement	120 V AC, 60 Hz
Power consumption	55W
Dimensions	281 × 254 × 320 mm ($11\frac{1}{8} \times 10 \times 12\frac{5}{8}$ inches) (W/H/D)
Weight	8.5 kg
Supplied accessories	Remote commander RM-768 with 2 size AA batteries (1) Telescopic antenna (1)

Design and specifications are subject to change without notice.

MICROFILM

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TRINITRON® COLOR TV

SONY®

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WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any).
   Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60–100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

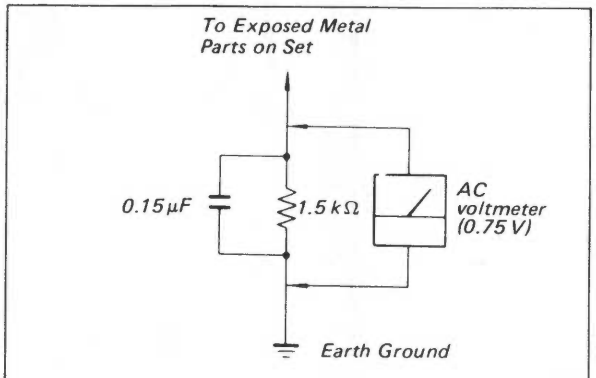


Fig. A. Using an AC voltmeter to check AC leakage.

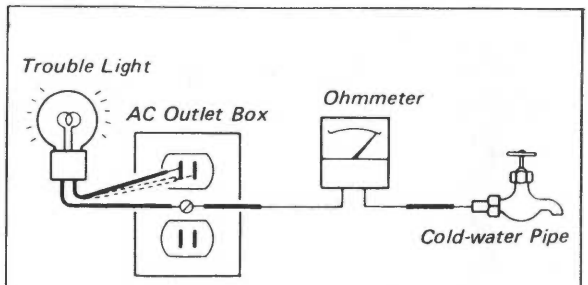
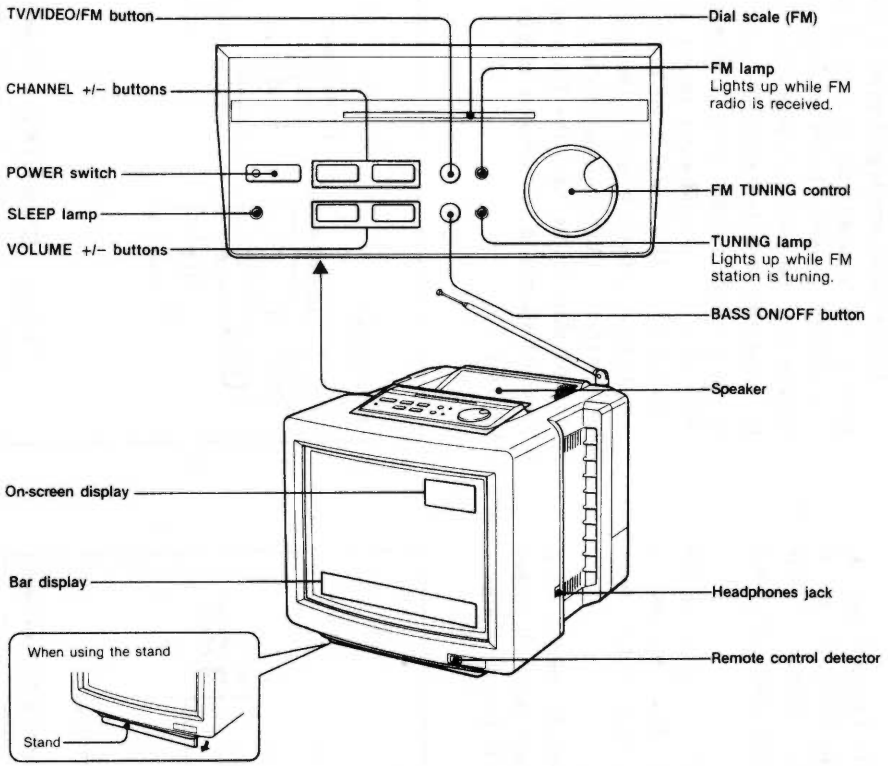


Fig. B. Checking for earth ground.

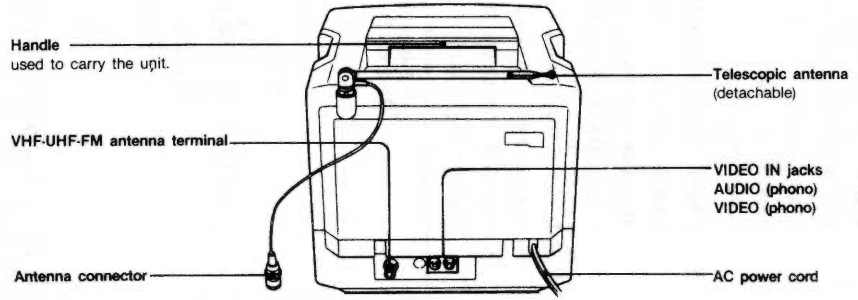
SECTION 1
GENERAL

1-1. LOCATION OF CONTROLS.

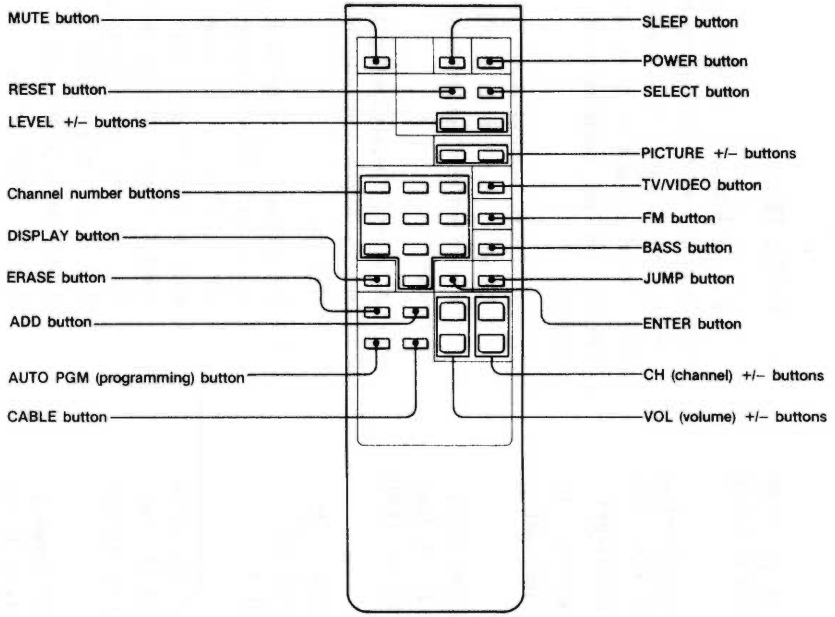
Front



Rear

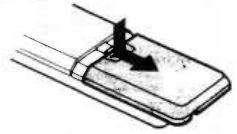


Remote Commander RM-768

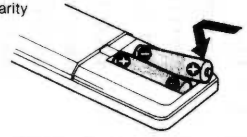


How to insert the batteries

1 Open the lid.



2 Insert two size AA (R6) batteries with correct polarity



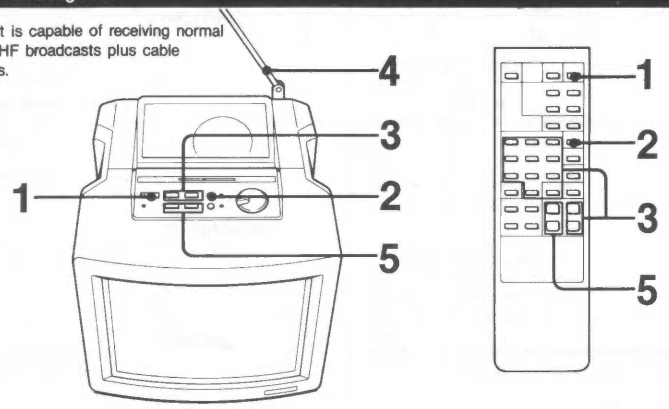
Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.

1-2. OPERATION.

Watching TV Programs

This TV unit is capable of receiving normal VHF and UHF broadcasts plus cable TV channels.

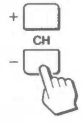


1 Press POWER.

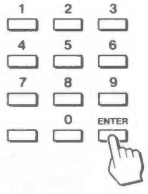
2 Press the TV/VIDEO button on the Remote Commander or the TV/VIDEO/FM button on the TV so that TV mode appears.

3 Select a channel in one of the following two ways.

To scan the preset channels in numerical sequence,
Press CH +/–.



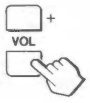
To select a channel directly,
Press the channel number button(s) and then ENTER. For example, to select channel example, to select channel 10, press 1, 0 and ENTER.



4 Adjust the antenna.
Adjust the length, direction and angle until the picture is clearest.

5 Press VOL + or – to adjust the volume.

For higher volume, press "+".
For lower volume, press "–".



To turn off the unit
Press POWER on the TV or on the Remote Commander.

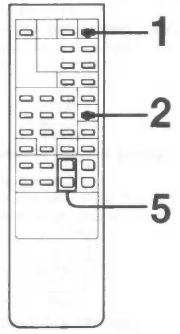
To scan the preset channels in numerical seqence
Press CH +/– buttons.

To watch cable TV channel
Press CABLE button and select a channel directly. When watching VHF/UHF channel, press CABLE button again so that "C" indicator on the screen disappears.

To keep the channel displayed on the screen
Press DISPLAY. To make the channel display disappear, press DISPLAY again.

Listening to the Radio

This TV unit can receive FM radio broadcasts.



1 Press POWER.

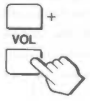
2 Press the FM button on the Remote Commander or TV/VIDEO/FM button on the TV so that the FM lamp lights.

3 Tune in the desired station with the FM TUNING control. The TUNING lamp lights while the FM station is tuned in.

4 Adjust the antenna.
Adjust the length, direction and angle until the sound is clearest.

5 Press the VOL + or – to adjust the volume.

For higher volume, press "+".
For lower volume, press "–".



From volume min. position to max. position, it takes 9 seconds by pressing VOL + button continuously.

To turn off the radio
Press POWER on the TV or on the Remote Commander.

Adjusting the Picture on the Remote Commander — in the TV Mode Only

How to adjust

1 Press SELECT button repeatedly until the on-screen display of the item to be adjusted appears.

SELECT

The item changes as follows:

HUE → COLOR → BRIGHT → SHARPNESS

2 Press LEVEL +/– buttons.

– LEVEL +

HUE
+: to make skin tones greenish
–: to make skin tones purplish

COLOR
+: to increase color intensity
–: to decrease color intensity

BRIGHT
+: to make the picture brighter
–: to make the picture darker

SHARPNESS
+: to make the picture sharper
–: to make the picture softer

To clear the adjustment levels and restore the factory set levels, press **RESET.**

To adjust the picture contrast

– PICTURE +

Press to decrese picture contrast with soft color

Press to increase picture contrast with vivid color

Switching Quickly Between Two Channels in the TV Mode Only

Press JUMP.

JUMP

Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enable you to keep track of two programms alternately.

Enjoying Convenient Features — in the Both TV and FM Radio Modes

To listen to the MEGA BASS sound
Press BASS ON/OFF button on the TV. You can enjoy the sound with MEGA BASS system which provides theater-like audio and concert hall intensity.
When watching TV or VIDEO, the indication BASS ON/OFF appears on the screen.

BASS ON

Muting the sound
Press MUTE. The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +.

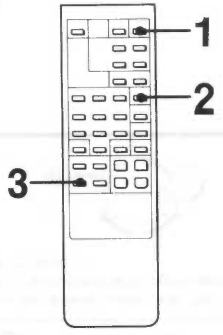
MUTING

To have the unit turn off automatically after one hour,
Press SLEEP. The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off.
To cancel the SLEEP timer, press SLEEP again so that the SLEEP indicator goes out, or turn off the TV.

SLEEP

To listen with a pair of headphones
Connect the optional headphones to ∩ HEADPHONES jack.
The sound is monaural.

To Preset All Receivable Channels Automatically



1 Press POWER.

POWER

2 Press TV/VIDEO on the Remote Commander or TV/VIDEO/FM on the TV so that the TV mode appears.

TV/VIDEO TV/VIDEO/FM

3 Press AUTO PGM on the Remote Commander.

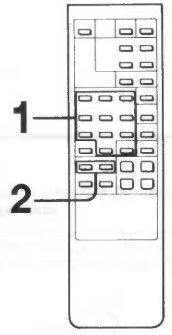
AUTO PGM

"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the units memory. When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

Receivable channels on this TV are:
VHF: 2–13
UHF: 14–69
Cable: 1–125

To check preset channels
Press CH +/–.

To Preset Only the Desired Channel or to Erase Unnecessary Channels



To add the channels that could not be preset with automatic programming because their signal strength was too weak, or to erase unnecessary channels, follow the steps below.

1 Press the channel number button(s) and then the ENTER to select the channel to be added or erased.

2 **To add channels — Press ADD.**

ADD

A "+" appears for a moment.
This channel has now been added to the channel scan memory.

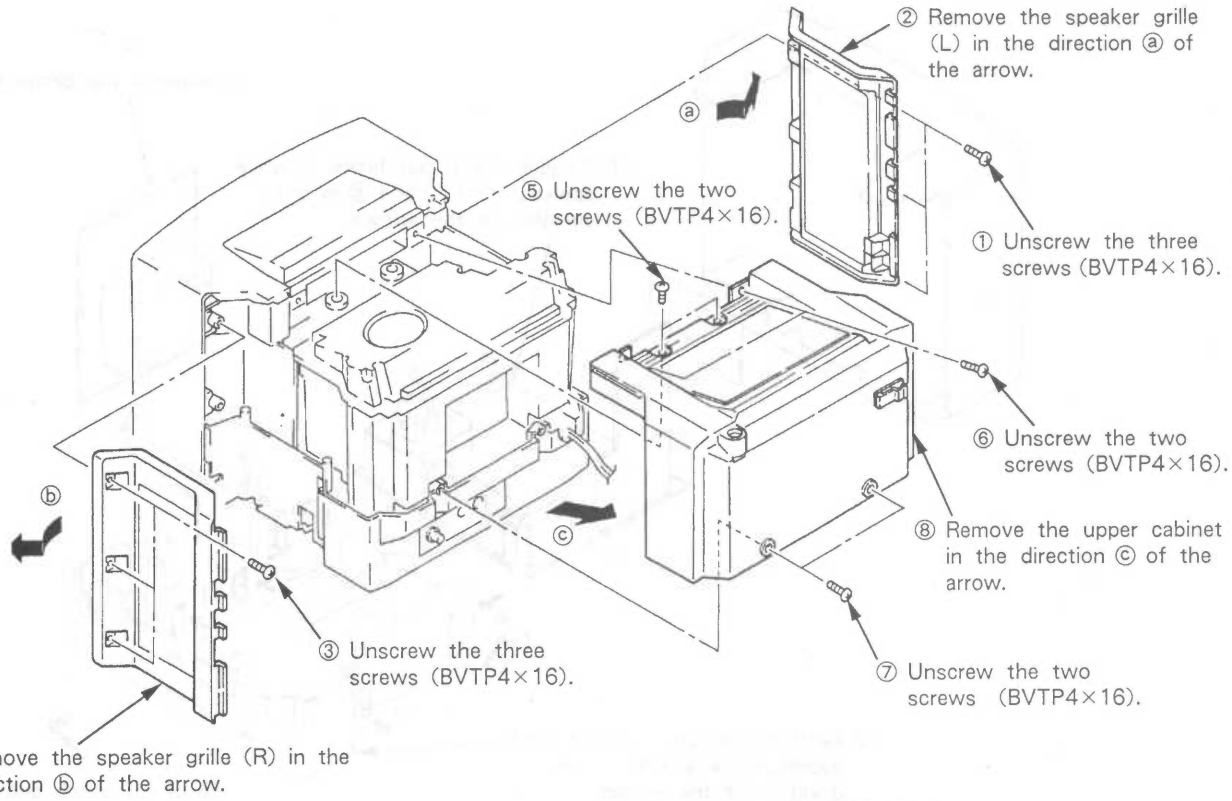
To erase channels — Press ERASE.

ERASE

A "–" appears for a moment.
This channel has been erased from the channel scan memory.
The next time the CH +/– button is pressed, this channel will be skipped.

SECTION 2
DISASSEMBLY

2-1. HOW TO REMOVE THE UPPER CABINET


② Remove the speaker grille (L) in the direction ⓐ of the arrow.
ⓐ
⑤ Unscrew the two screws (BVTP4×16).
① Unscrew the three screws (BVTP4×16).
⑥ Unscrew the two screws (BVTP4×16).
ⓑ
ⓒ
⑧ Remove the upper cabinet in the direction ⓒ of the arrow.
③ Unscrew the three screws (BVTP4×16).
⑦ Unscrew the two screws (BVTP4×16).
④ Remove the speaker grille (R) in the direction ⓑ of the arrow.

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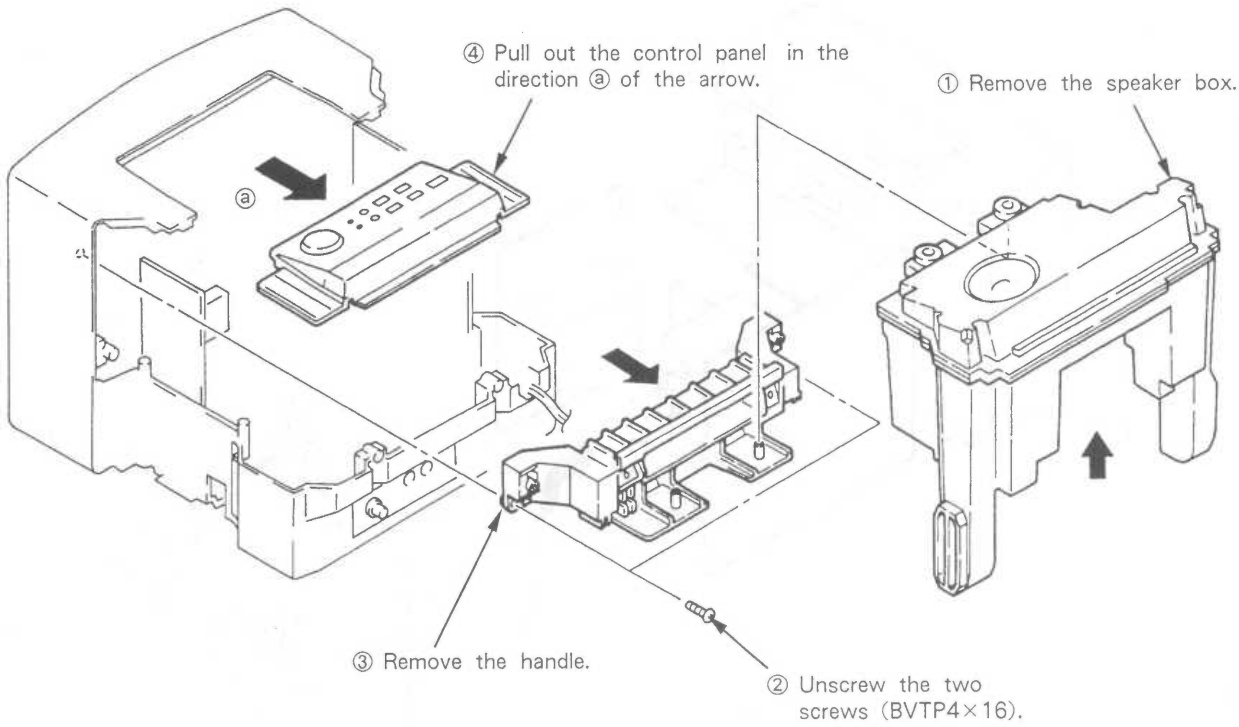
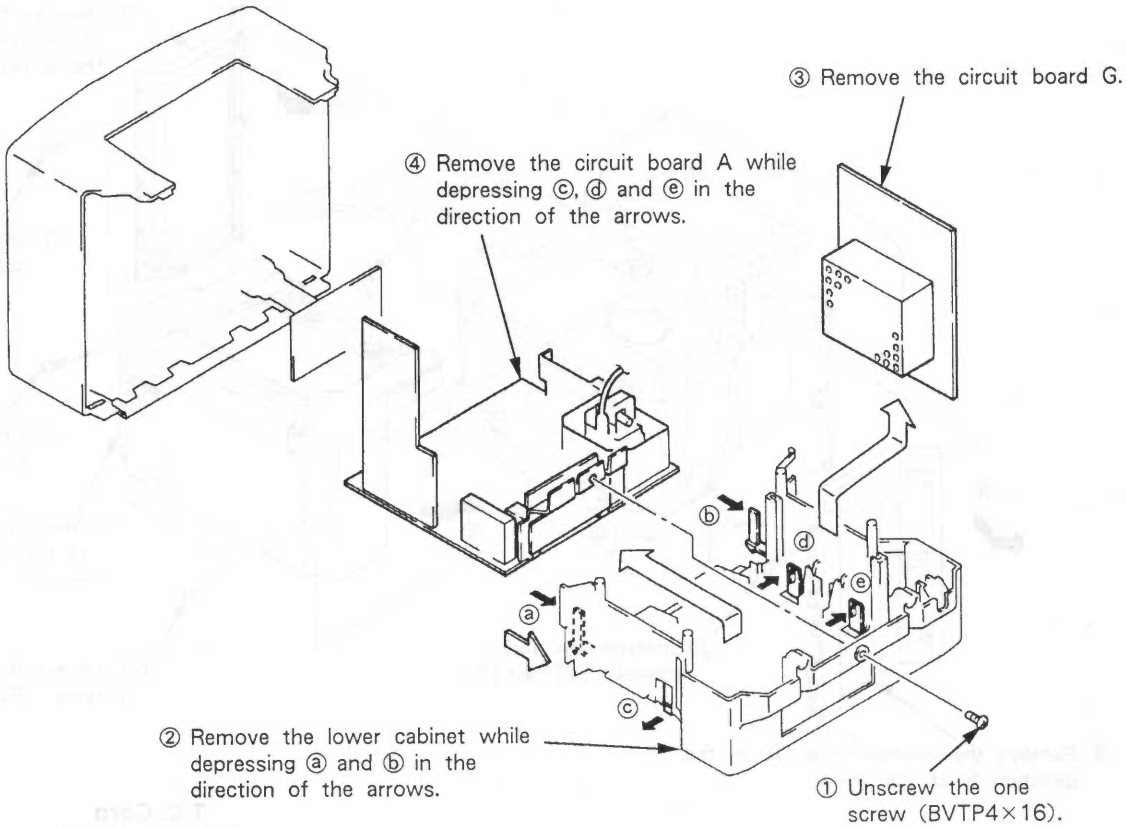
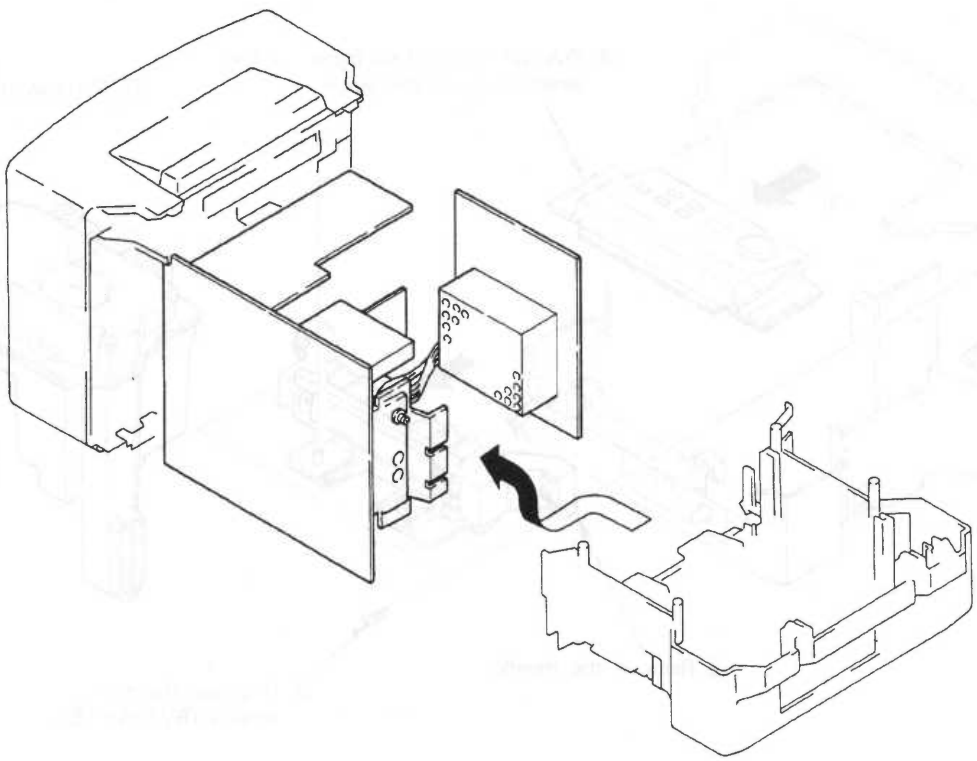
2-2. HOW TO REMOVE THE CONTROL PANEL


④ Pull out the control panel in the direction ⓐ of the arrow.
① Remove the speaker box.
ⓐ
③ Remove the handle.
② Unscrew the two screws (BVTP4×16).

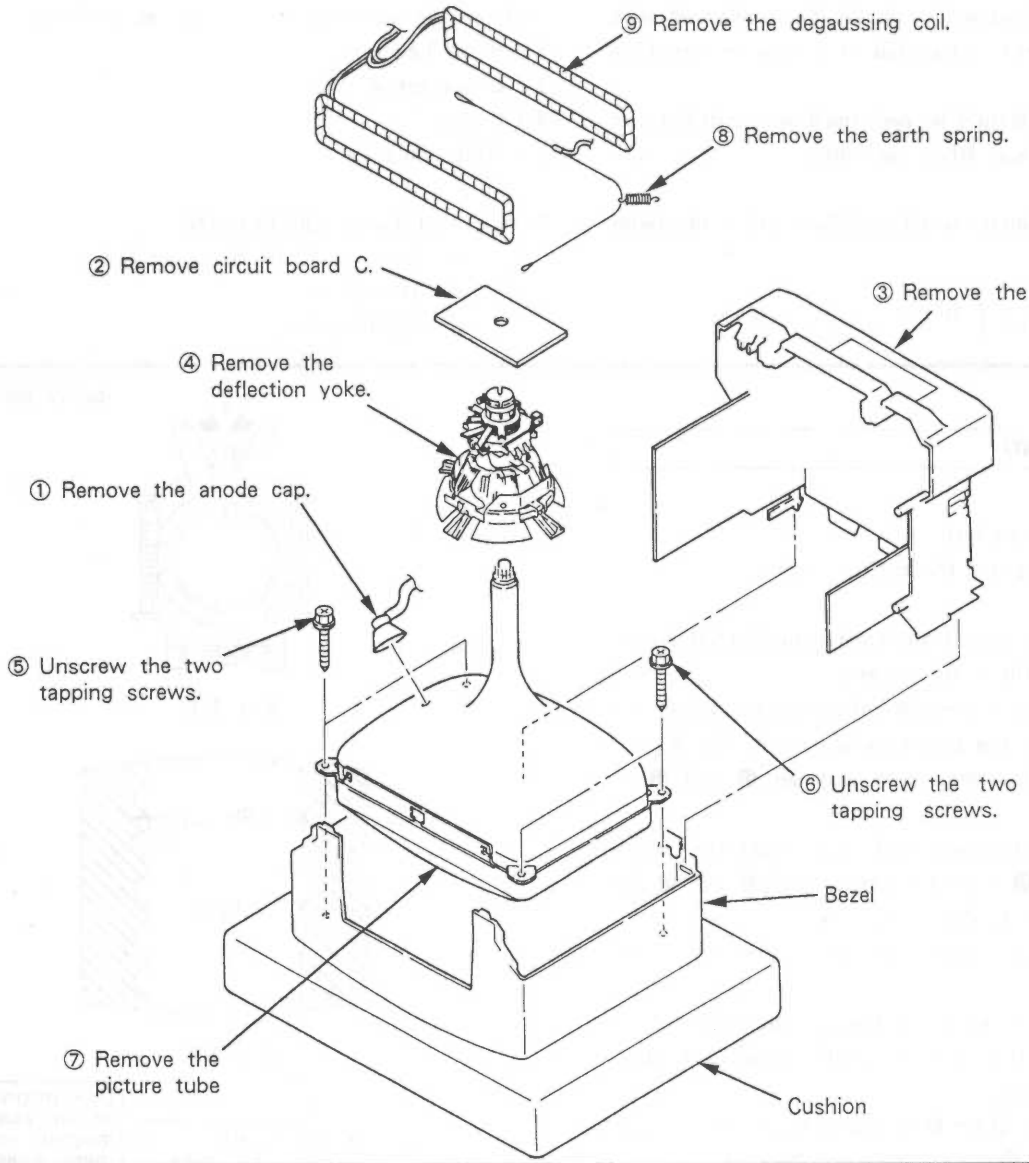
2-3. HOW TO REMOVE THE CIRCUIT BOARD


③ Remove the circuit board G.
④ Remove the circuit board A while depressing ⓒ, ⓓ and ⓔ in the direction of the arrows.
ⓑ
ⓓ
ⓔ
ⓐ
ⓒ
② Remove the lower cabinet while depressing ⓐ and ⓑ in the direction of the arrows.
① Unscrew the one screw (BVTP4×16).

2-4. SERVICE POSITION

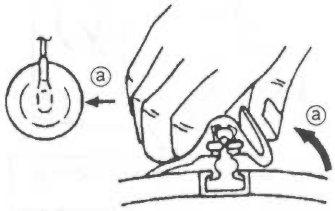


2-5. HOW TO REMOVE THE PICTURE TUBE

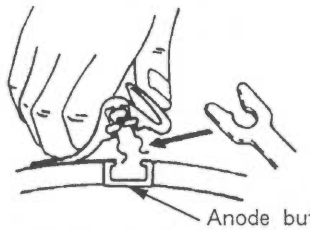

⑨ Remove the degaussing coil.
⑧ Remove the earth spring.
② Remove circuit board C.
③ Remove the lower cabinet.
④ Remove the deflection yoke.
① Remove the anode cap.
⑤ Unscrew the two tapping screws.
⑥ Unscrew the two tapping screws.
Bezel
⑦ Remove the picture tube
Cushion

- **REMOVAL OF ANODE-CAP**
- **REMOVING PROCEDURES**

Be sure to short-circuit the anode of picture tube and the anode cap to ground after removing the anode cap.



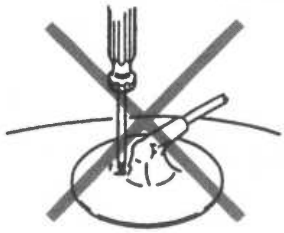
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.

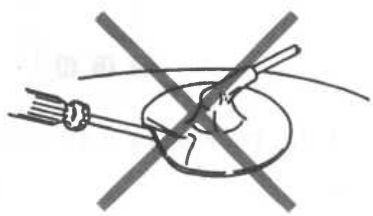


Push and release the anode cap pin with remover.

- **HOW TO HANDLE AN ANODE-CAP**

① Don't hurt the surface of anode-caps with sharp shaped material !
② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built in the rubber.
③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be mode when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Perform the adjustments in order as follows :

3-1. Beam Landing
3-2. Convergence
3-3. Focus
3-4. White Balance

Controls and switch should be set as follows unless otherwise noted :

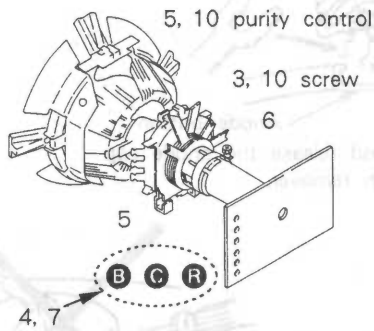
PICTURE control
BRIGHTNESS control
} RESET

Note : Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

3-1. BEAM LANDING

Preparation :
- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Turn on set power supply and receive an all-white signal.
2. Evenly degauss the entire screen.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig. 3-1.
4. Set BKG VR Ⓡ to maximum and set Ⓑ and Ⓒ to minimum.
5. Move the deflection yoke back, and adjust the purity control so that Ⓡ is in the center and Ⓒ and Ⓑ are at the sides, evenly.(Fig. 3-2.)
6. Move the deflection yoke forward so that the entire screen is red.
   *If the deflection yoke is pushed all the way to the PICTURE TUBE then moved slightly forward, landing adjustment is easier.
7. Substitute Ⓖ, then Ⓑ for Ⓡ in step 4 and check landing.
8. Rotate Ⓡ, Ⓒ and Ⓑ once each and check landing.
9. When landing is not right, adjust the purity control and use magnets as shown in Fig. 3-3. then repeat step 7 and 8.
10. When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.



Note ; The numbers (3-10) show above steps.

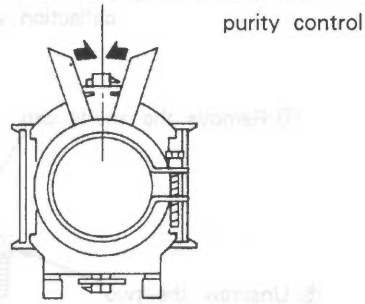


Fig. 3-1.

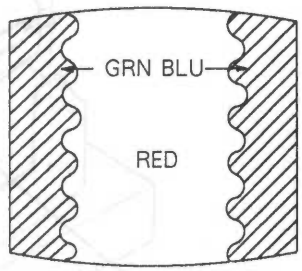


Fig. 3-2.

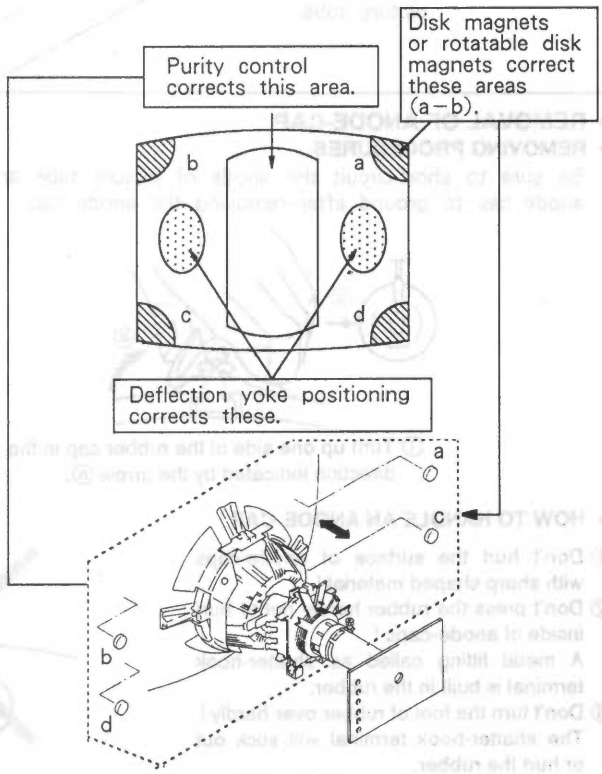


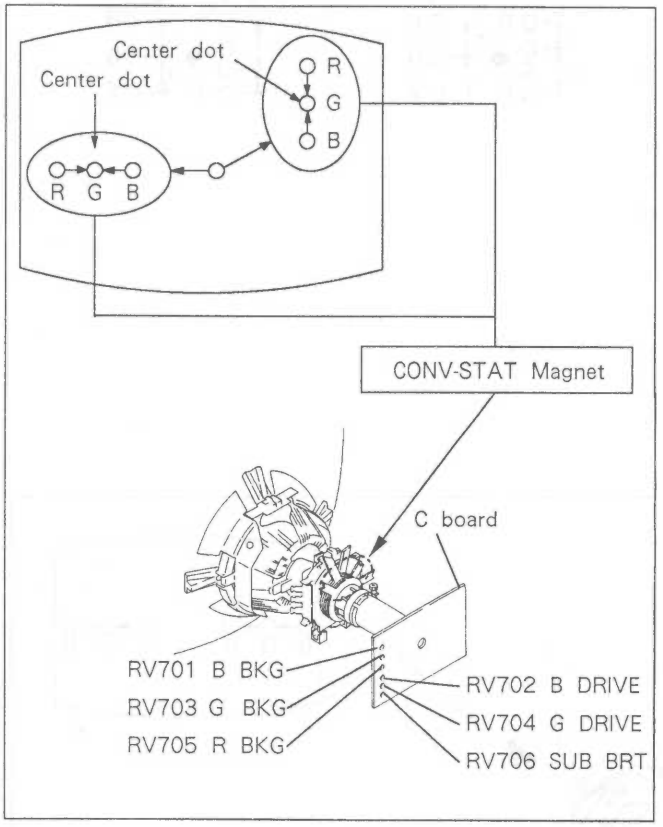
Fig. 3-3.

3-2. CONVERGENCE

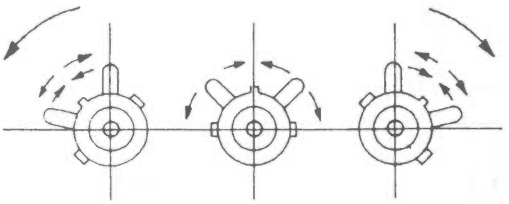
Preparation :

- Before starting, perform FOCUS, H. SIZE, V SIZE and V. LIN adjustments.
- Turn BRIGHTNESS control to fully counterclockwise and PICTURE control to click position.
- Feed in the dot pattern.

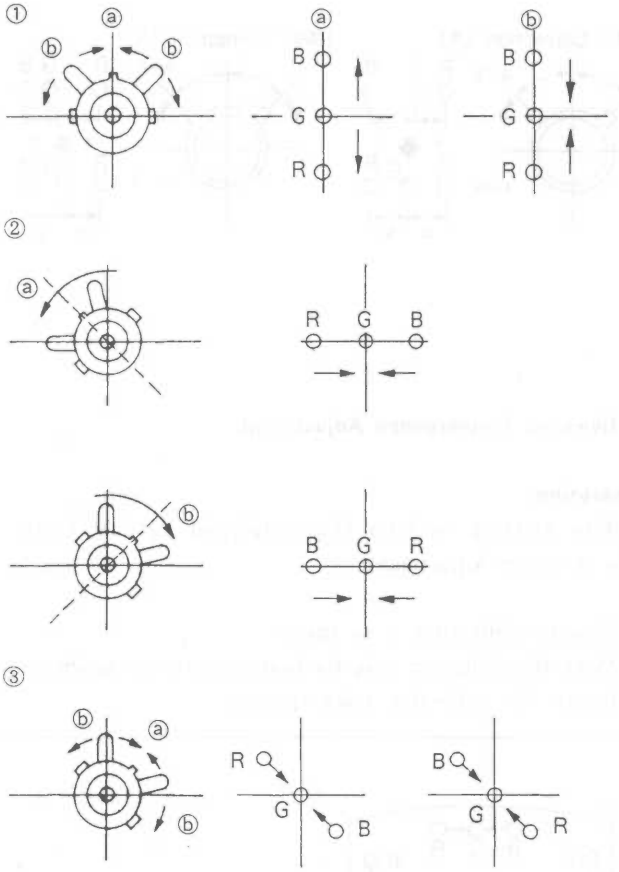
(1) Horizontal and Vertical Static Convergence



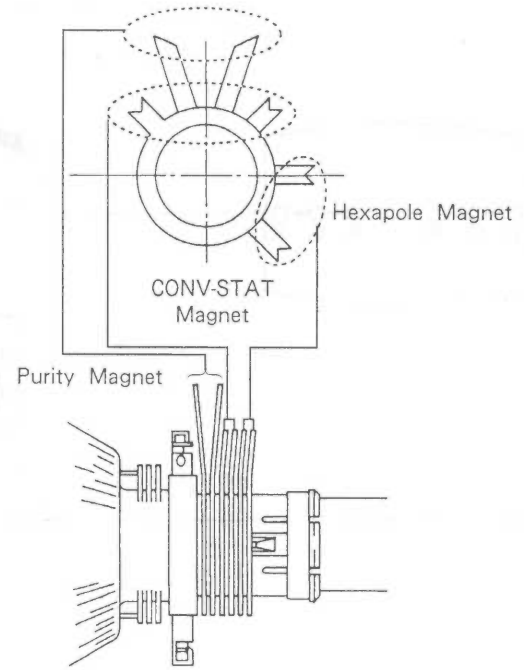
1. Adjust CONV-STAT magnet to coincide red, green and blue dots on the center of screen.
- Tilt the CONV-STAT magnet and adjust static convergence to open or close the CONV-STAT magnet.



2. When the CONV-STAT magnet is moved in the direction of arrow ⓐ and ⓑ, Red, Green and Blue dots move as shown below.

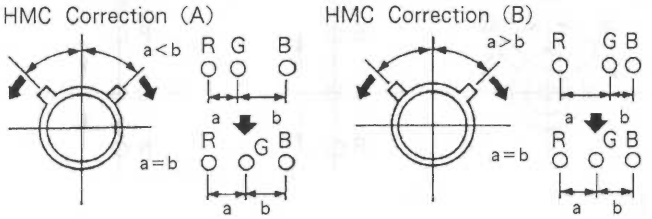


※If the red and green dots do not coincide with blue dot, adjustment with BMC (6-poles) magnat.

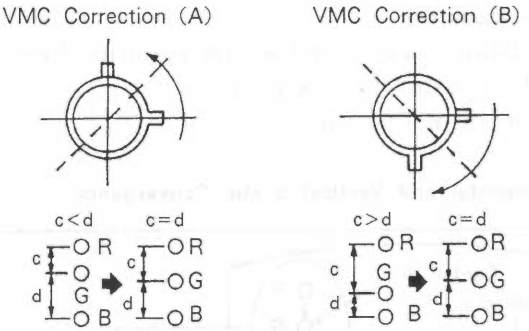


• HMC and VMC correction for BMC (6-poles) magnet.

1. HMC (Horizontal Misconvergence) correction and motion of the Electron Beam with the BMC (6-poles) magnet.



2. VMC (Vertical Misconvergence) correction and motion of the Electron Beam with the BMC (6-poles) magnet.

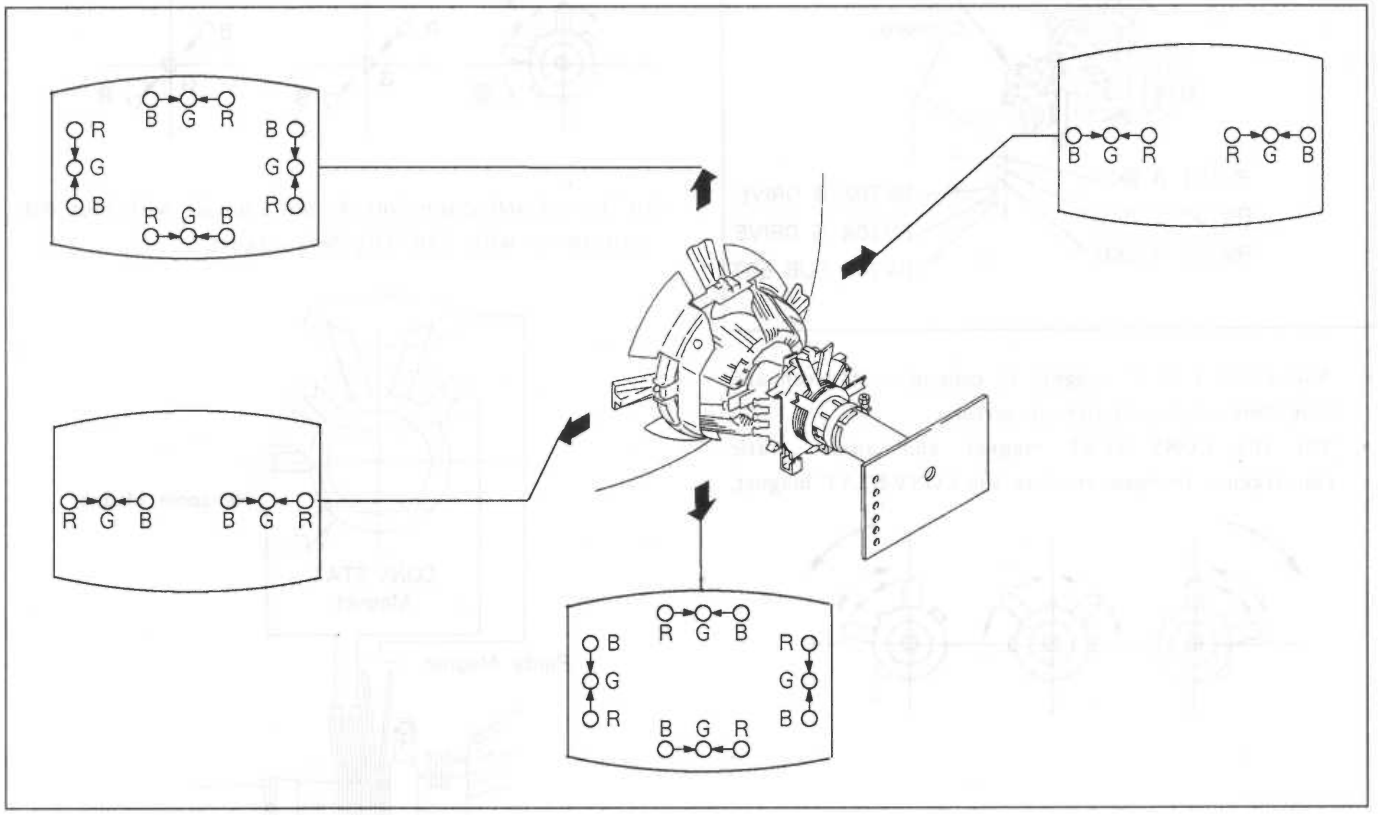


(2) Dynamic Convergence Adjustment

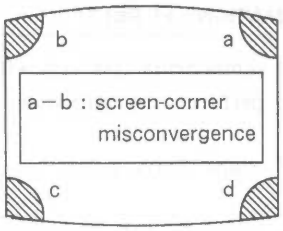
Preparation :

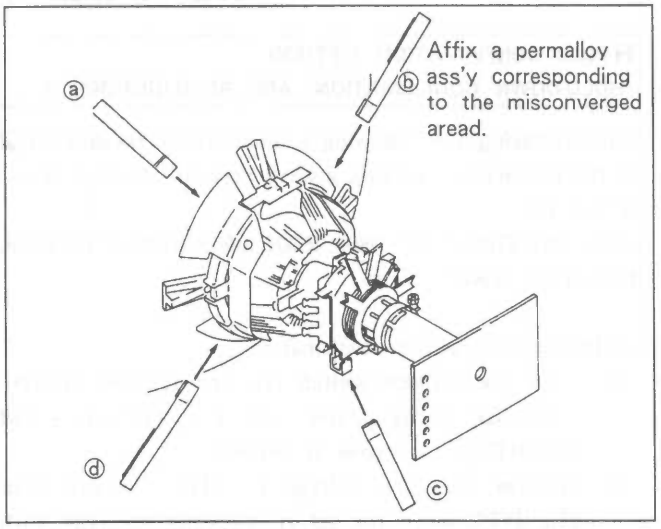
• Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Remove deflection yoke spacers.
2. Move the deflection yoke for best convergence as shown.
3. Install the deflection yoke spacers.



(3) Screen-corner Convergence

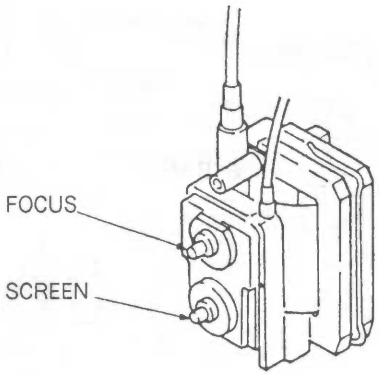




3-3. FOCUS

(1) Input monoscope signal.
PICTURE control } RESET
BRIGHT control }

(2) Adjust FOCUS control for a best picture at the center and both sides of the screen.



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3-4. WHITE BALANCE

- Input dot signal from pattern generator.
- PICTURE control } RESET
  BRIGHTNESS control }

[SCREEN (G2)]

1. Adjust BKG VRs (RV701, RV703, and RV705) so that voltages on the red, green and blue cathodes are 150 ±1VDC with an oscilloscope as shown in Fig. 1.

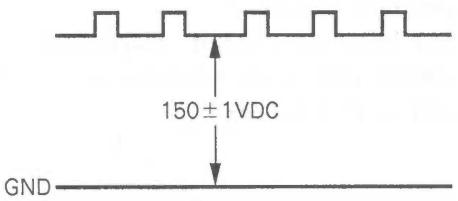


Fig. 1

2. Observe the screen and adjust Screen control to obtain the faintly visible background of dot signal.
   Note the color that first becomes visible by turning SCREEN control.
   Do not turn a BKG control for this color.

[WHITE BALANCE]

1. Input entirely white signal from pattern generator.
2. Set the PICTURE control to obtain the faintly visible raster on the screen.
3. Observe the screen and adjust the other two BKG VRs for best white balance.
4. Set the PICTURE control at maximum.
5. Observe the screen and adjust the DRIVE VRs (RV702, RV704) for best white balance.
6. Repeat step 2 through 5 several times.

SECTION 4
SAFTY RELATED ADJUSTMENTS

⊠ R822 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

When replacing the following components (marked with ◪ on the schematic diagram), always perform the adjustment as follows :

C507, C801, C810, D504, D806, IC301, R509, R806, R807, R808, R822, T802 (FBT)

(1) Preparation before confirmation

1. Turn the POWER switch ON, and receiver entirely color-bar signals and set the PICTURE and BRIGHTNESS controls to normal.
2. Confirm that the voltage of TP86 is more than $21.2^{+1.5}_{-1.0}$VDC when the set is operating normally with 120±2V AC supply.

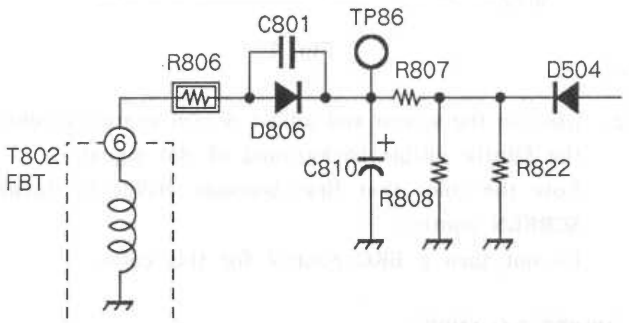
(2) Hold-down operation confirmation

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS controls to normal.
2. Apply DC voltage of over 24.0VDC gradually to TP86 via IT40 from the DC stavilized power source. Confirm that the minimum voltage is less than 25.0VDC whereby the raster disappears during of hold-down circuit.

NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

(3) Hold-down readjustment

When step (2) is not satisfied, readjustment should be performed by altering the resistance value of R822 (a component marked with ⊠).

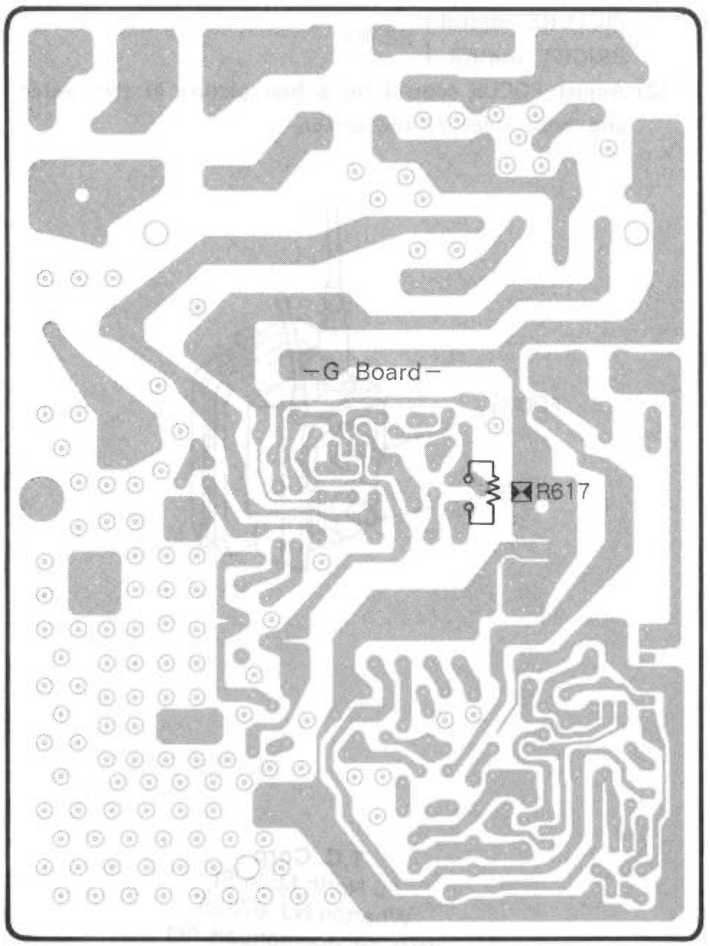


+B MAX VOLTAGE CONFIRMATION (⊠ R617)

When replacing the following components (marked with ◪ on the schematic diagram), perform the adjustment as follows :

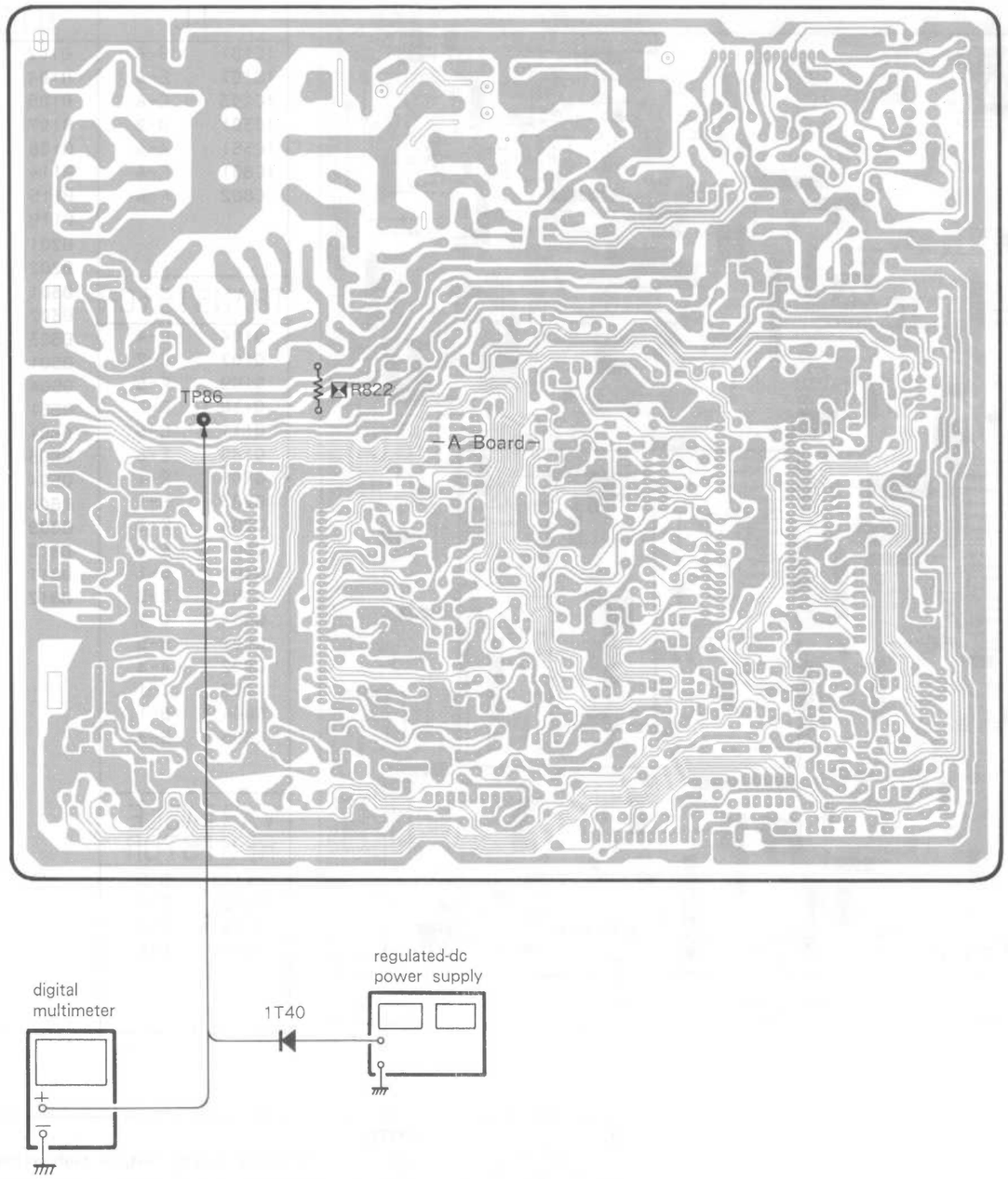
C604, C626, D603, D605, IC601, R604, R605, R617, T601

(1) Supply 130^{+3}_{0}VAC to with variable auto-transformer.
(2) Receive color-bar signals.
(3) Set the PICTURE and BRIGHTNESS controls to minimum.
(4) Confirm the voltage of +B line is less than 118.0VDC.
(5) When step (4) is not satisfied, readjustment should be performed by altering the resistance value of R617 (a component marked with ⊠).



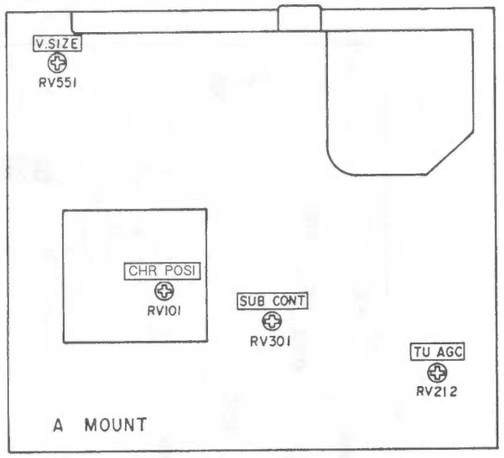
(Conductor side)

KV-10FMR20 RM-768



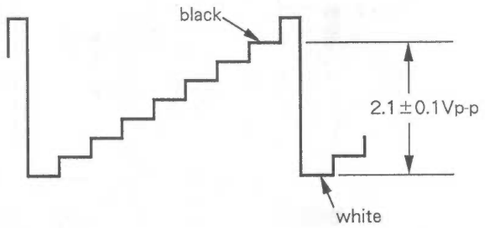
SECTION 5
CIRCUIT ADJUSTMENTS

5-1. A BOARD ADJUSTMENTS



SUB CONTRAST ADJUSTMENT (RV301)

1. Receive a color-bar signal.
2. PICTUREmaximum
   BRIGHT50%
3. Observe the Q302 emitter waveform on the oscilloscope.
4. Adjust RV301 until the black and white signal level becomes 2.1±0.1Vp-p.



TUNER AGC ADJUSTMENT (RV212)

1. Receive a color-bar signal.
2. Adjust RV1 so that snow noise and cross modulation just disappear from the picture.

V. SIZE ADJUSTMENT (RV551)

1. Receve a cross-hatch signal.
2. Set the PICTURE and BRIGHT control to RESET position.
3. Adjust RV551 for best picture.

V. CENTER ADJUSTMENT (S551)

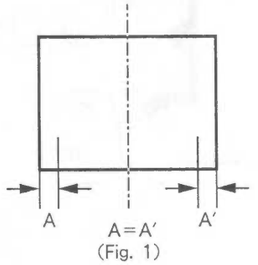
1. Receive a cross-hatch signal.
2. Set the PICTURE and BRIGHT control to RESET position.
3. Adjust S551 for best position.

H. CENTER ADJUSTMENT (S801)

1. Receive a cross-hath signal.
2. Set the PICTURE and BRIGHT control to RESET position.
3. Adjust S801 for best position.

CHARACTER POSITION ADJUSTMENT (RV101)

1. Receive a color-bar signal.
2. Set the PICTURE control to maximum.
3. Adjust RV101 as shown in Fig. 1.



(Fig. 1)

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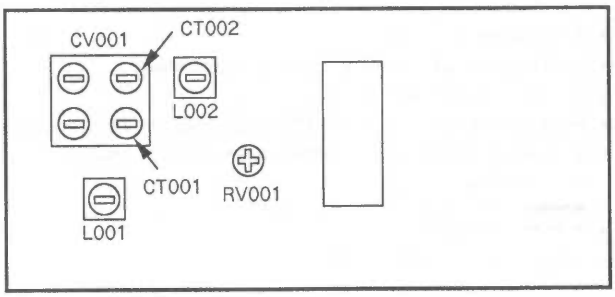
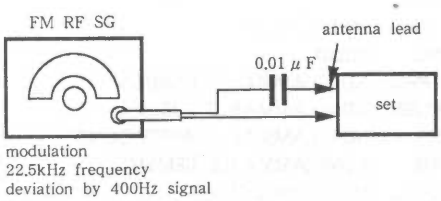
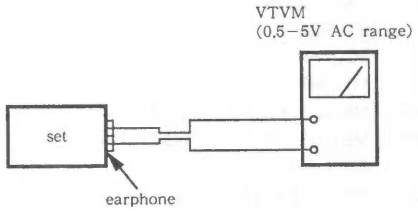
5-2. H3 BOARD ADJUSTMENTS



FM SECTION PREPARATION





- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM TRACKING ADJUSTMENT (L001, CT001, L002, CT002)

1. Adjust L001 (RF) and CT001 (RF) for maximum reading on VTVM.
2. Adjust L002 (86.5MHz) and CT002 (109.5MHz) for a maximum reading on VTVM.

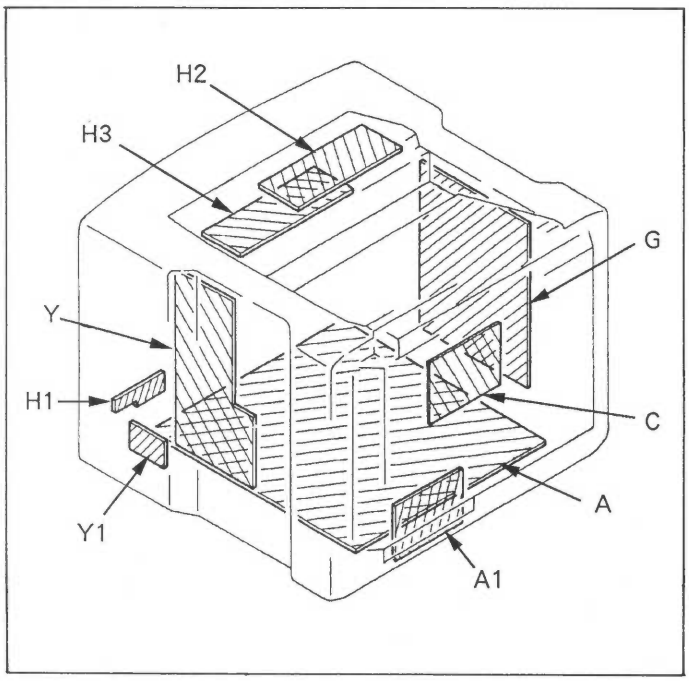
NOTE : During this adjustment RF level must be between 10 and 20dB μV/75 Ω in order to avoid tracking error due to over input.

AF LEVEL ADJUSTMENT (RV001)

1. Receive a broadcast.
2. Adjust RV001 so that the TV sound level and the FM radio sound become identical in level by switching the TV and FM radio.

SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION



Note :

- All capacitors are in μ F unless otherwise noted. pF : μ μ F 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm Rating electrical power : ¼W

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⊠ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.(Refer to R617 and R822 adjust on Page 14-16.)
- When replacing the part in below table be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (⊠)
C604, C626, D603, D605, IC601, R604, R605, R617, T601	R617 (B+ MAX)
C507, C801, C810, D504, D806, IC301, R509, R806, R807, R808, R822, T802 (FBT)	R822 (HOLD-DOWN)

- Voltages are dc with respect to ground unless otherwise
- All voltages are in V.
- Readings are taken with a color-bar signal input.
- : adjustment for repair.
- Readings are taken with a NTSC 3.58 color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B+ bus.
- : B− bus.
- : signal path.
- Readings are taken with a color-bar signal input.
- Voltage in audio circuit are measured receving the FM broadcast.

Reference information

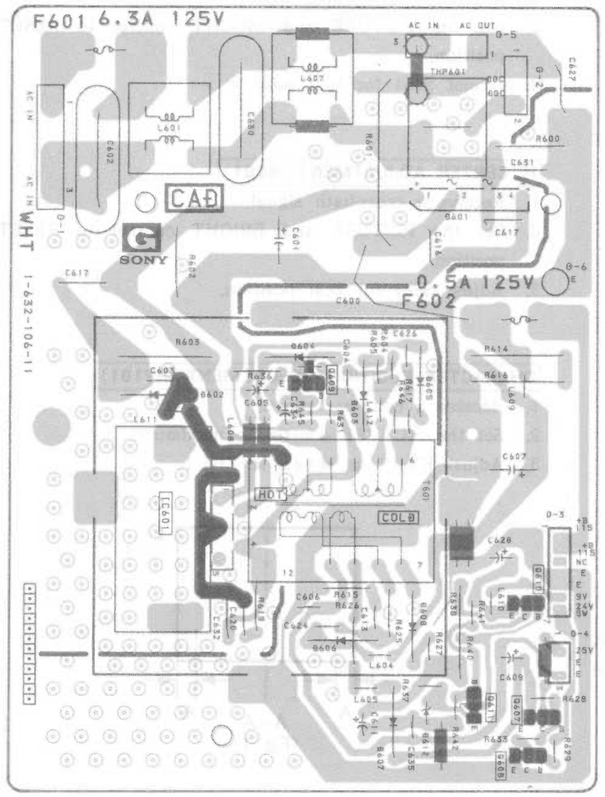
RESISTOR	:	RN	METAL FILM
	:	RC	SOLID
	:	FPRD	NONFLAMMABLE CARBON
	:	FUSE	NONFLAMMABLE FUSIBLE
	:	RS	NONFLAMMABLE WIREWOUND
	:	RB	NONFLAMMABLE CEMENT
COIL	:	LF-8L	MICRO INDUCTOR
CAPACITOR	:	TA	TANTALUM
	:	PS	STYROL
	:	PP	POLYPROPYLENE
	:	PT	MYLAR
	:	MPS	METALIZED POLYESTER
	:	MPP	METALIZED POLYPROPYLENE
	:	ALB	BIPOLAR
	:	ALT	HIGH TEMPERATURE
	:	ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

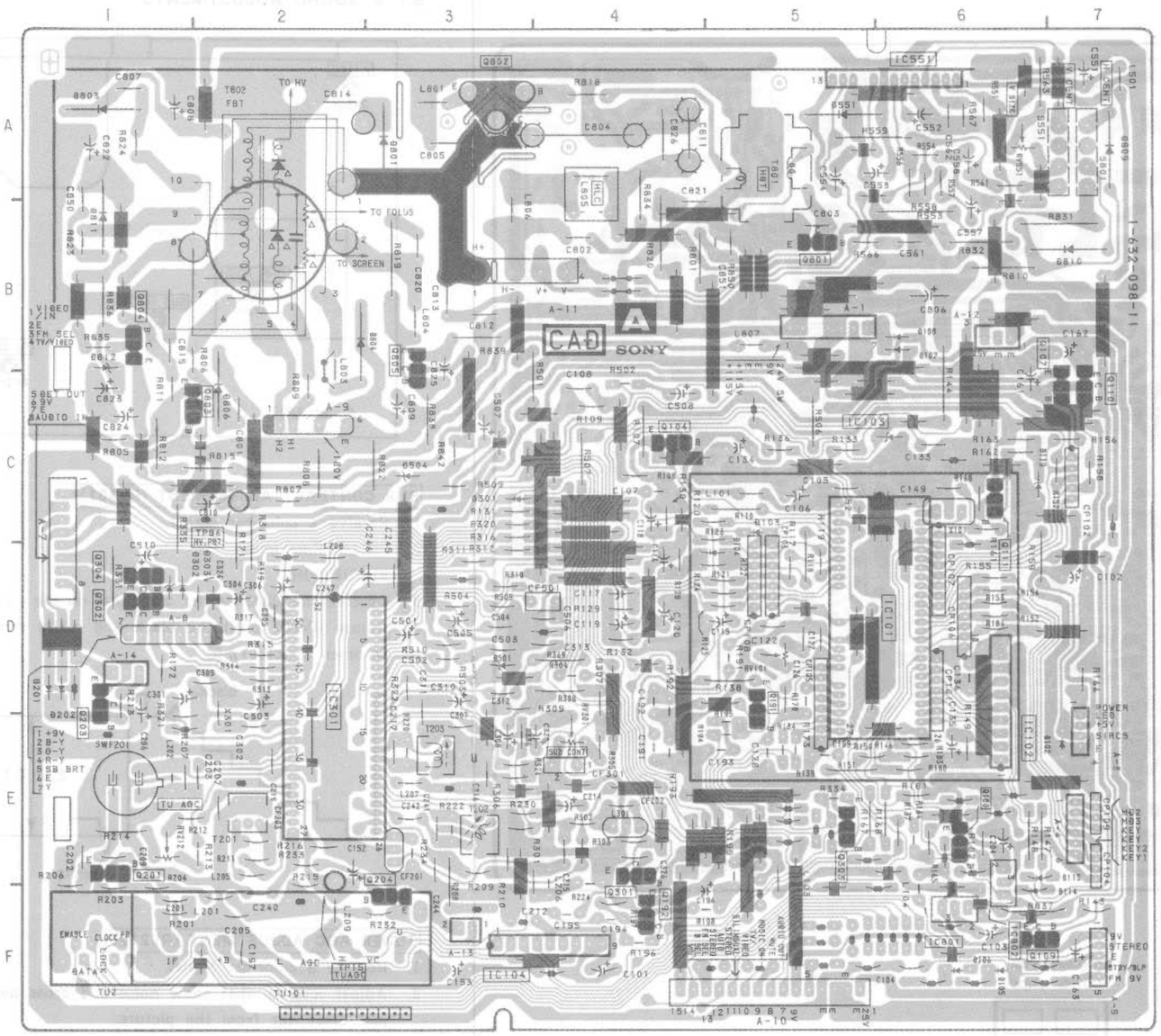
6-2. PRINTED WIRING BOARDS (1)
–CONDUCTOR SIDE–

[POWER SUPPLY] **G** [R. G. B OUT] **C** [TV/VIDEO AUDIO SW] **A1** **A** [VIF/SIF, Y/C, JUNGLE, MEMORY, μ-CONTOROLLER, H/V OUT]

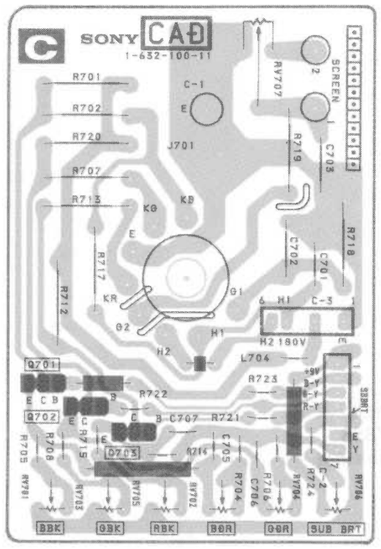
–G Board–



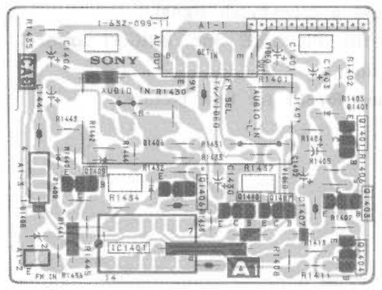
–A Board–



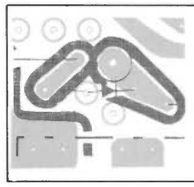
–C Board–



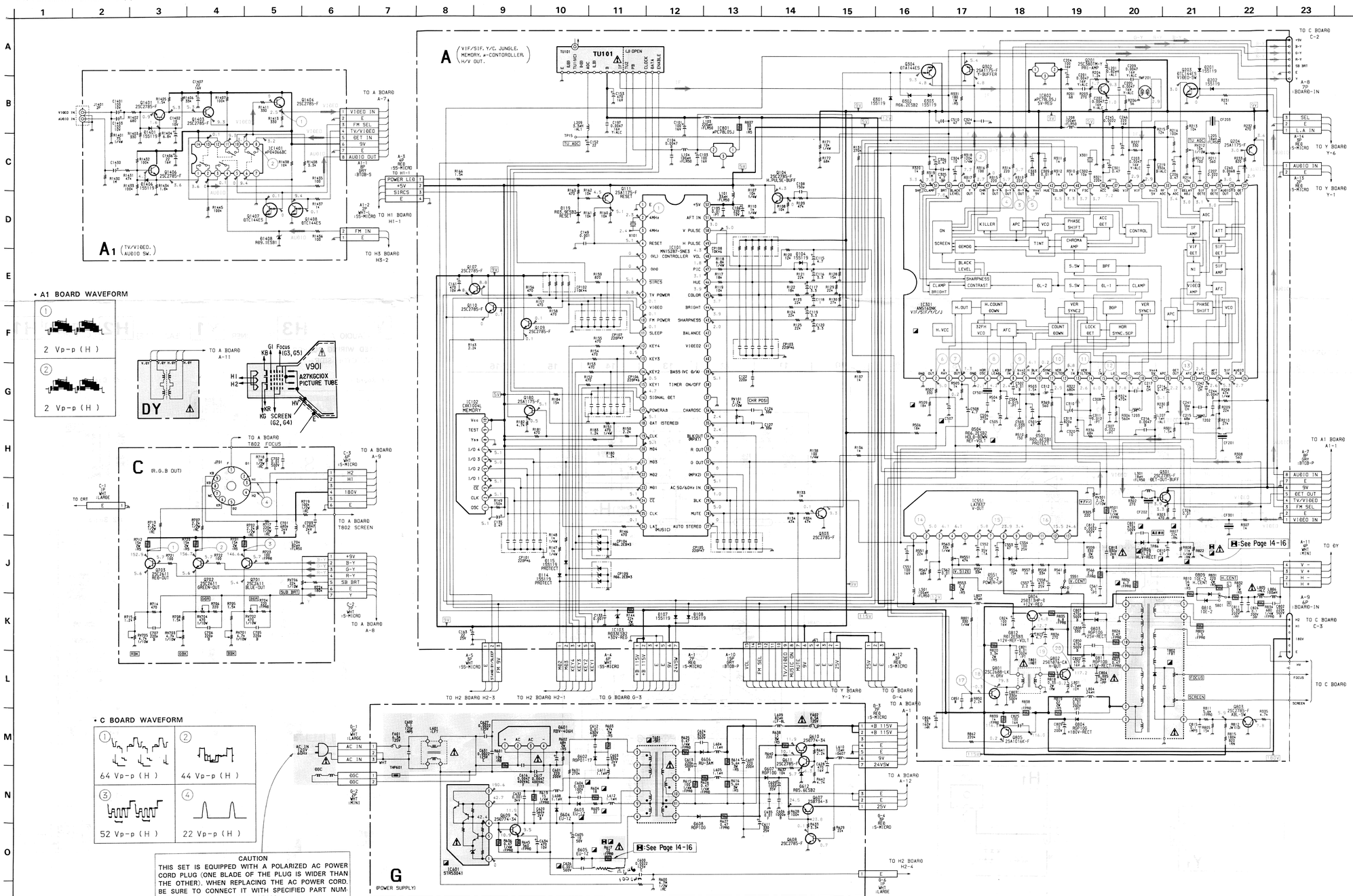
–A1 Board–



IC		DIODE	
IC101	D-6	D102	E-7
IC102	E-6	D104	D-5
IC103	C-6	D105	F-6
IC301	D-2	D107	B-6
IC551	A-6	D108	B-6
IC801	F-6	D114	F-6
IC802	F-6	D115	E-6
		D119	C-6
		D201	D-1
		D202	D-1
TRANSISTOR		D301	C-3
		D302	D-1
Q104	C-4	D303	D-1
Q107	C-7	D501	D-3
Q109	F-6	D504	C-3
Q110	C-7	D551	A-5
Q111	C-6	D801	A-3
Q180	E-6	D803	A-1
Q201	E-1	D804	B-2
Q203	D-1	D806	C-2
Q204	F-3	D809	A-7
Q301	E-4	D810	B-7
Q302	D-1	D811	B-1
Q303	E-5	D812	B-1
Q304	D-1		
Q801	B-5		
Q802	A-3		
Q803	C-1		
Q804	B-1		
Q805	B-3		
VARIABLE RESISTOR			
RV101	D-5		
RV121	E-1		
RV301	E-4		
RV551	A-6		



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

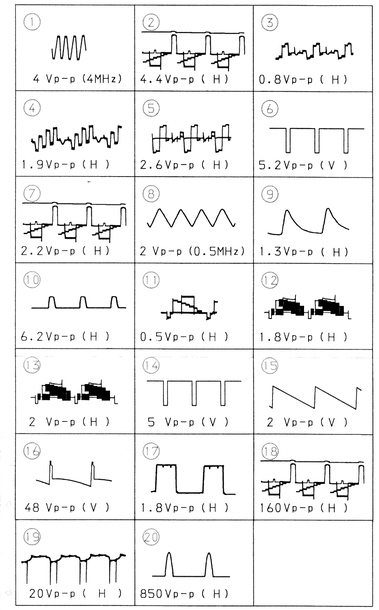


• A1 BOARD WAVEFORM

• C BOARD WAVEFORM

CAUTION
THIS SET IS EQUIPPED WITH A POLARIZED AC POWER CORD PLUG (ONE BLADE OF THE PLUG IS WIDER THAN THE OTHER). WHEN REPLACING THE AC POWER CORD, BE SURE TO CONNECT IT WITH SPECIFIED PART NUMBER AS SHOWN IN THIS DIAGRAM.

• A BOARD WAVEFORM



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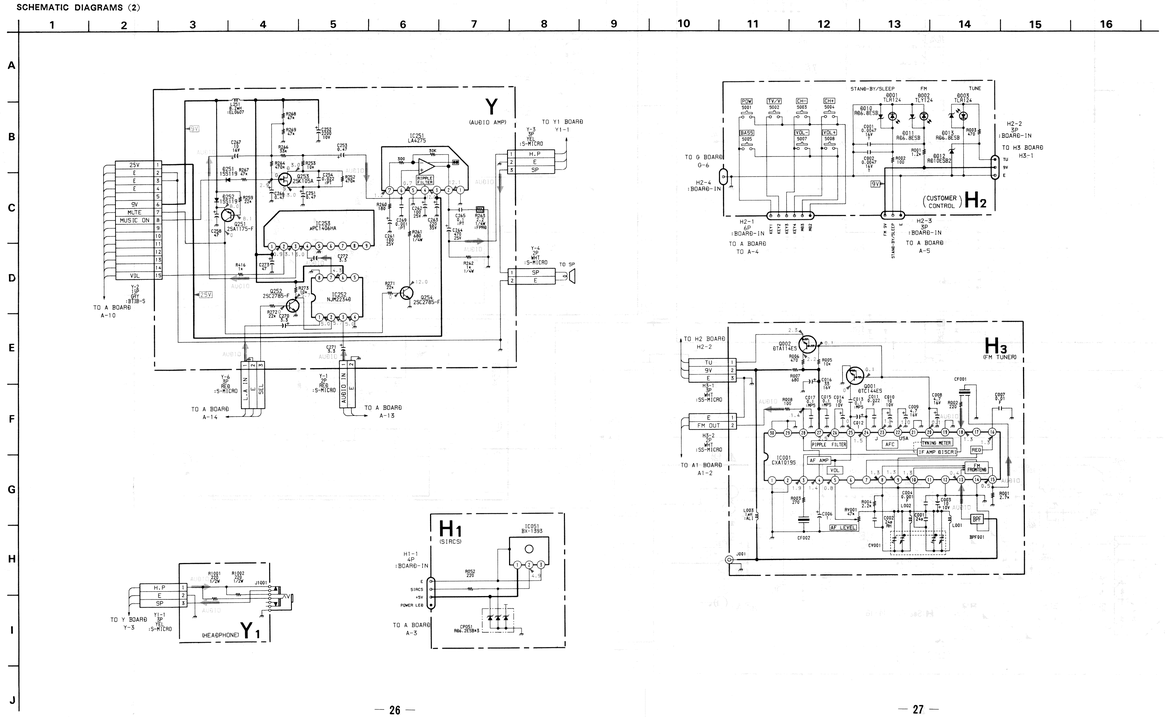
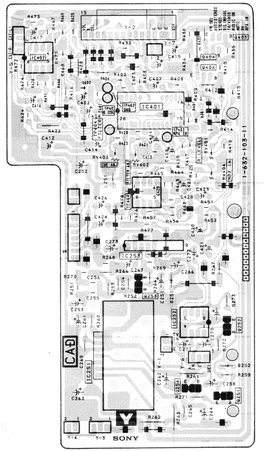
SCHEMATIC DIAGRAMS (2)



Y [AUDIO AMP] **H3** [FM TUNER] **Y1** [HEADPHONE] **H2** [CUSTOMER CONTROL] **H1** [SIRCS]

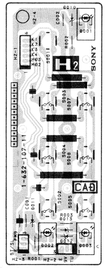
PRINTED WIRING BOARDS (2)
– CONDUCTOR SIDE –

– Y Board –

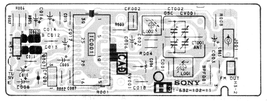


– Y1 Board –

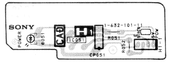
– H2 Board –



– H3 Board –



– H1 Board –



6-4. SEMICONDUCTORS

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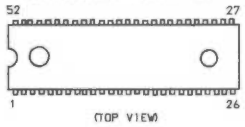
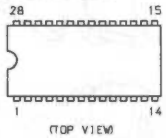


BX-1393

CXA1019S



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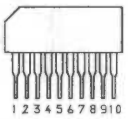

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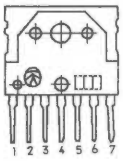

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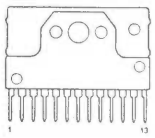

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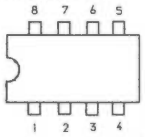

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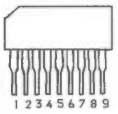

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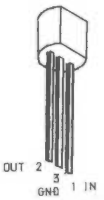

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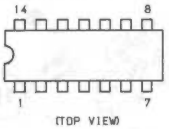

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ÐTA144ES
ÐTC144ES

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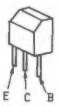
2SA1175TP-F
2SC2785

2SB734
2SÐ774-34



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2SC2611
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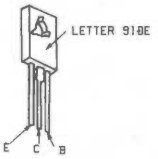

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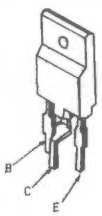
2SÐ1876-CA



2SK105A-10

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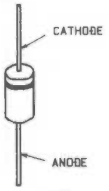
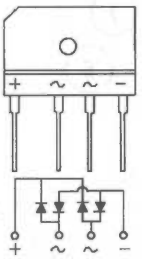
RGP10G
RGP10GPKG23
10E-2



RBV-406H



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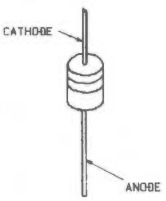
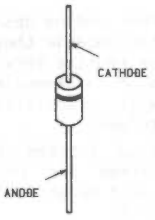
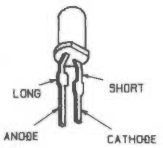
RÐ12ES-B3
RÐ3.9ES-B2
RÐ33ES-B2
RÐ5.6ES-B1
RÐ5.6ES-B2
RÐ6.2ES-B2
RÐ6.8ES-B
RÐ9.1ES-B1
1SS119



RU-3AM



TLR124
TLY124



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Wharton NJ 07885
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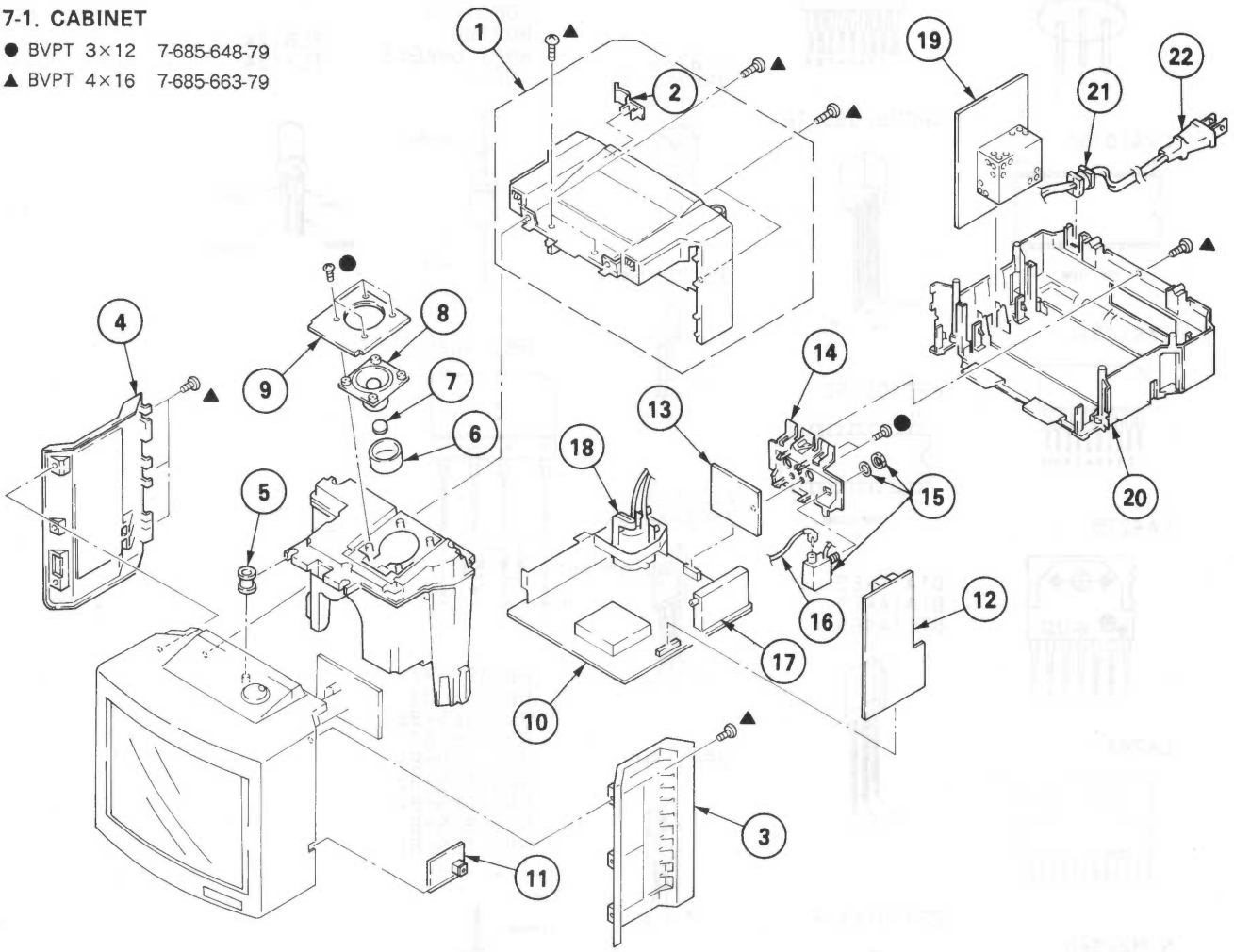
SECTION 7
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CABINET

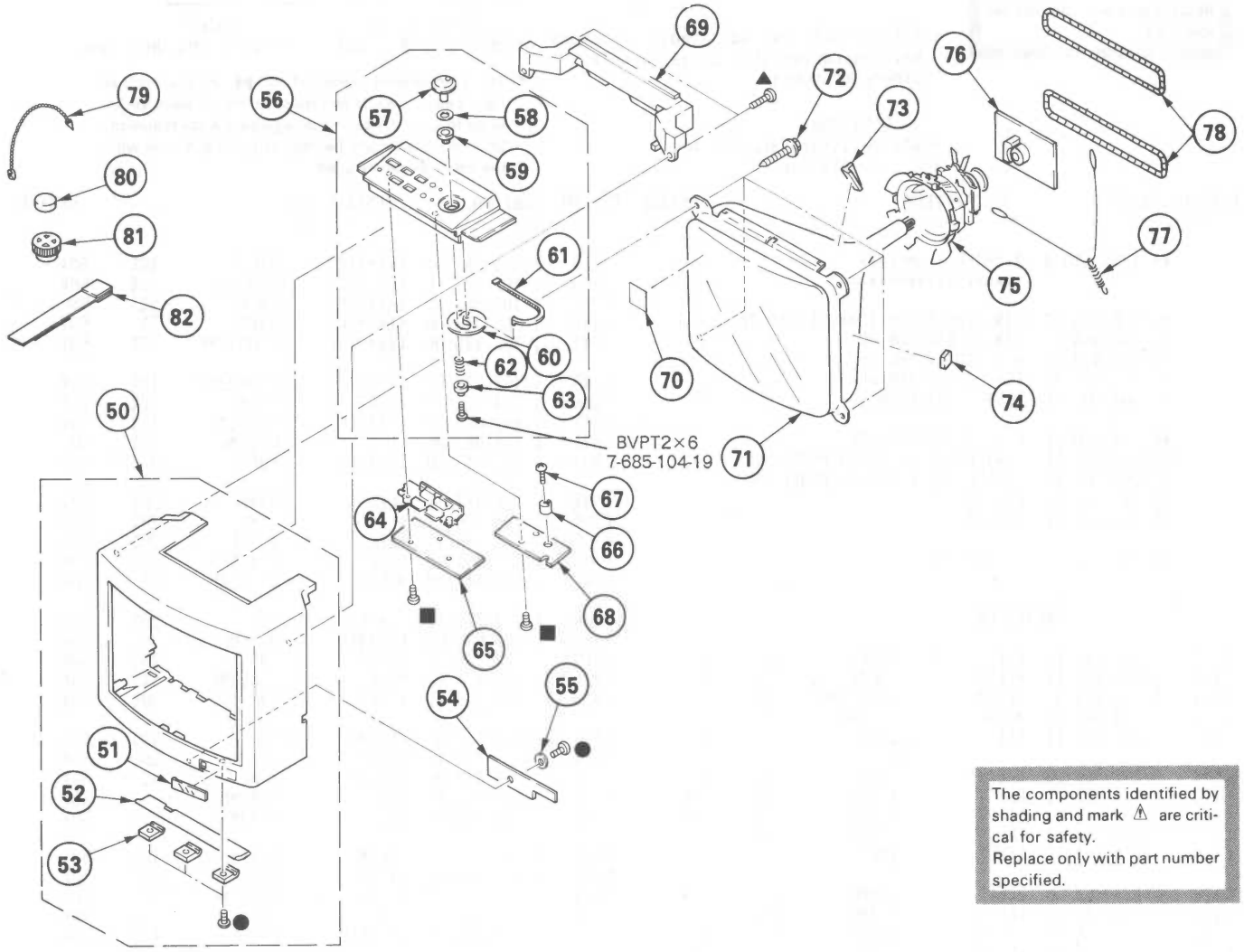
● BVPT 3×12 7-685-648-79
▲ BVPT 4×16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4396-502-1	CABINET ASSY, UPPER	2
2	4-329-127-00	CLAMP, CORD	
3	4-396-536-01	GRILLE (RIGHT), SPEAKER	
4	4-396-535-01	GRILLE (LEFT), SPEAKER	
5	4-374-745-11	CUSHION (A)	
6	4-396-539-01	SHIELD, SPEAKER	
7	4-396-541-01	TAPE, ADHESIVE	
8	1-503-918-11	SPEAKER	
9	*X-4396-505-1	BOARD (SMALL) ASSY, BAFFLE	
10	*A-1296-610-A	A BOARD, COMPLETE	
11	*1-632-104-11	Y1 BOARD	
12	*A-1394-220-A	Y BOARD, COMPLETE	
13	*A-1296-701-A	A1 BOARD, COMPLETE	
14	4-396-524-01	TERMINAL BOARD	
15	⚠.1-417-184-11	SELECTOR, ANTENNA	
16	*1-575-164-11	CABLE, PIN	
17	⚠.1-465-298-11	TUNER UNIT (BTP-3A401)	
18	⚠.1-439-476-11	TRANSFORMER ASSY, FLYBACK	
19	*A-1316-095-A	G BOARD, COMPLETE	
20	4-396-531-01	CABINET, LOWER	
21	⚠.4-334-223-02	GROMMET, AC CORD	
22	⚠.1-559-396-11	CORD, POWER	

7-2. BEZEL

■ BVPT 3×8 7-685-646-79
● BVPT 3×12 7-685-648-79
▲ BVPT 4×16 7-685-663-79



The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
50	X-4396-503-1	BEZEL ASSY (BLACK)	51-53
51	4-396-512-01	PLATE, ORNAMENTAL	
52	4-396-523-01	FOOT	
53	4-396-516-01	CLAMP	
54	*1-632-101-11	H1 BOARD	
55	*4-308-030-00	WASHER	
56	X-4396-504-1	PANEL ASSY	57-63
57	4-396-514-01	KNOB, TUNING	
58	4-396-503-01	SHEET, RUBBER	
59	4-396-504-01	GEAR (A)	
60	4-396-505-01	GEAR (B)	
61	4-396-515-01	INDICATOR	
62	4-887-120-00	SPRING (T.T.), COMPRESSION	
63	4-396-508-01	CAP	
64	4-396-522-01	BUTTON, MULTI	
65	*1-632-107-11	H2 BOARD	
66	4-396-506-01	COUPLER	
67	3-699-408-01	SCREW (M1.7X4)	
68	*A-1375-084-A	H3 BOARD, COMPLETE	
69	X-4396-501-1	HANDLE ASSY	
70	3-703-706-01	STICKER, SONY SYMBOL (25)	
71	⚠.8-735-821-05	PICTURE TUBE (A27KGC10X)	
72	4-307-249-00	SCREW (5), TAPPING	
73	4-309-369-00	SPACER, DEFLECTION YOKE	
74	1-452-512-11	MAGNET	
75	⚠.1-451-354-11	DEFLECTION YOKE (Y11SLA)	
76	*A-1330-998-A	C BOARD, COMPLETE	
77	4-303-774-99	SPRING	
78	⚠.1-426-462-11	COIL, DEMAGNETIZATION	
79	4-308-870-00	CLIP, LEAD WIRE	
80	1-452-032-00	MAGNET, DISK; 10MM ϕ	
81	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
82	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	

SECTION 8
ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

- The components identified by ✖ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1296-610-A	A BOARD, COMPLETE			
		**********			
	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
	*1-506-468-11	PIN, CONNECTOR 3P			
	*1-506-469-11	PIN, CONNECTOR 4P			
	*1-506-471-11	PIN, CONNECTOR 6P			
	*1-564-506-11	PLUG, CONNECTOR 3P			
	*1-564-510-11	PLUG, CONNECTOR 7P			
	*1-565-499-11	CONNECTOR, BOARD TO BOARD 8P			
	*1-565-506-11	CONNECTOR, BOARD TO BOARD 15P			
	*4-341-751-01	EYELET			
	*4-341-752-01	EYELET			
	*4-381-724-01	HOLDER, IC			
		<CAPACITOR>			
C101	1-126-101-11	ELECT	100MF	20%	16V
C103	1-126-101-11	ELECT	100MF	20%	16V
C104	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C105	1-130-483-00	MYLAR	0.01MF	5%	50V
C106	1-126-176-11	ELECT	220MF	20%	10V
C108	1-101-361-00	CERAMIC	150PF	5%	50V
C115	1-124-927-11	ELECT	4.7MF	20%	50V
C116	1-123-382-00	ELECT	3.3MF	20%	50V
C117	1-123-382-00	ELECT	3.3MF	20%	50V
C118	1-124-791-11	ELECT	1MF	20%	50V
C119	1-123-382-00	ELECT	3.3MF	20%	50V
C120	1-123-382-00	ELECT	3.3MF	20%	50V
C122	1-102-978-00	CERAMIC	220PF	5%	50V
C126	1-102-963-00	CERAMIC	33PF	5%	50V
C127	1-102-963-00	CERAMIC	33PF	5%	50V
C133	1-101-001-00	CERAMIC	0.001MF		50V
C135	1-124-902-00	ELECT	0.47MF	20%	50V
C149	1-101-001-00	CERAMIC	0.001MF		50V
C152	1-126-233-11	ELECT	22MF	20%	50V
C153	1-126-103-11	ELECT	470MF	20%	16V
C161	1-124-472-11	ELECT	470MF	20%	10V
C163	1-126-233-11	ELECT	22MF	20%	25V
C197	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C201	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C202	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C203	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C204	1-126-101-11	ELECT	100MF	20%	16V
C205	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C206	1-124-902-00	ELECT	0.47MF	20%	50V
C207	1-101-005-00	CERAMIC	0.022MF		50V
C209	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C214	1-124-902-00	ELECT	0.47MF	20%	50V
C215	1-101-888-00	CERAMIC	68PF	5%	50V
C216	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C217	1-102-937-00	CERAMIC	4PF	0.25PF	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C219	1-162-288-31	CERAMIC	330PF	10%	50V
C240	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C241	1-101-884-00	CERAMIC	56PF	5%	50V
C242	1-102-949-00	CERAMIC	12PF	5%	50V
C244	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C245	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C246	1-124-120-11	ELECT	220MF	20%	16V
C247	1-102-074-00	CERAMIC	0.001MF	10%	50V
C301	1-124-902-00	ELECT	0.47MF	20%	50V
C302	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C303	1-124-917-11	ELECT	33MF	20%	50V
C304	1-123-875-11	ELECT	10MF	20%	50V
C305	1-124-768-11	ELECT	4.7MF	20%	50V
C306	1-124-902-00	ELECT	0.47MF	20%	50V
C307	1-130-487-00	MYLAR	0.022MF	5%	50V
C308	1-124-791-11	ELECT	1MF	20%	50V
C309	1-101-004-00	CERAMIC	0.01MF		50V
C310	1-124-791-11	ELECT	1MF	20%	50V
C311	1-130-484-00	MYLAR	0.012MF	5%	50V
C312	1-124-499-11	ELECT	1MF	20%	50V
C313	1-102-117-00	CERAMIC	820PF	10%	50V
C320	1-123-875-11	ELECT	10MF	20%	50V
C324	1-101-880-00	CERAMIC	47PF	5%	50V
C326	1-101-004-00	CERAMIC	0.01MF		50V
C501	1-124-464-11	ELECT	0.22MF	20%	50V
C502	1-102-129-00	CERAMIC	0.01MF	10%	50V
C503	1-130-487-00	MYLAR	0.022MF	5%	50V
C504	1-130-485-00	MYLAR	0.015MF	5%	50V
C505	1-124-791-11	ELECT	1MF	20%	50V
C506	1-102-111-00	CERAMIC	270PF	10%	50V
C507	1-124-791-11	ELECT	1MF	20%	50V
C508	1-124-927-11	ELECT	4.7MF	20%	50V
C510	1-124-910-11	ELECT	47MF	20%	50V
C551	1-126-101-11	ELECT	100MF	20%	16V
C552	1-131-347-00	TANTALUM	1MF	10%	35V
C553	1-124-910-11	ELECT	47MF	20%	50V
C554	1-124-478-11	ELECT	100MF	20%	25V
C557	1-124-925-11	ELECT	2.2MF	20%	50V
C558	1-124-480-11	ELECT	470MF	20%	25V
C561	1-130-495-00	MYLAR	0.1MF	5%	50V
C562	1-101-004-00	CERAMIC	0.01MF		50V
C801	1-102-228-00	CERAMIC	470PF	10%	500V
C802	1-102-244-00	CERAMIC	220PF	10%	500V
C803	1-102-030-00	CERAMIC	330PF	10%	500V
C804	⚠ 1-136-070-11	FILM	0.005MF	3%	2KV
C806	1-123-024-21	ELECT	33MF		160V
C807	1-102-228-00	CERAMIC	470PF	10%	500V
C808	1-124-912-11	ELECT	330MF	20%	50V
C809	1-123-939-00	ELECT	10MF	20%	200V
C810	1-124-910-11	ELECT	47MF	20%	50V

A

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C811	1-136-105-00	FILM	0.33MF	5%	200V
C812	1-101-821-00	CERAMIC	0.0022MF		500V
C813 ⚠	1-162-115-91	CERAMIC	330PF	10%	2KV
C815	1-136-165-00	FILM	0.1MF	5%	50V
C820	1-106-367-00	MYLAR	0.01MF	10%	200V
C821	1-106-367-00	MYLAR	0.01MF	10%	200V
C822	1-124-480-11	ELECT	470MF	20%	25V
C823	1-124-927-11	ELECT	4.7MF	20%	50V
C824	1-126-101-11	ELECT	100MF	20%	16V
C825	1-126-101-11	ELECT	100MF	20%	16V
C850	1-102-228-00	CERAMIC	470PF	10%	500V

<FILTER>

CF201	1-527-943-00	FILTER, CERAMIC	
CF202	1-409-332-00	CERAMIC TRAP (4.5MHZ)	
CF203	1-404-816-11	DISCRIMINATOR, CERAMIC	
CF301	1-236-547-11	TRAP, LC	
CF501	1-577-661-11	VIBRATOR, CERAMIC	
SWF201	1-404-479-00	SAWF	

<DIODE>

D104	8-719-911-19	DIODE 1SS119
D107	8-719-911-19	DIODE 1SS119
D108	8-719-911-19	DIODE 1SS119
D114	8-719-911-19	DIODE 1SS119
D115	8-719-911-19	DIODE 1SS119
D119	8-719-109-72	DIODE RD3.9ES-B2
D125	8-719-911-19	DIODE 1SS119
D201	8-719-911-19	DIODE 1SS119
D202	8-719-911-19	DIODE 1SS119
D301	8-719-911-19	DIODE 1SS119
D302	8-719-109-93	DIODE RD6.2ES-B2
D303	8-719-911-19	DIODE 1SS119
D501	8-719-109-88	DIODE RD5.6ES-B1
D504	8-719-109-93	DIODE RD6.2ES-B2
D551	8-719-200-02	DIODE 10E-2
D803	8-719-300-33	DIODE RU-3AM
D804	8-719-300-33	DIODE RU-3AM
D806 ⚠	8-719-302-43	DIODE EL1Z
D809	8-719-200-02	DIODE 10E-2
D810	8-719-200-02	DIODE 10E-2
D811	8-719-300-33	DIODE RU-3AM
D812	8-719-110-33	DIODE RD12ES-B3

<IC>

IC101	8-759-420-37	IC MN15287-SNE3
IC102	8-759-803-24	IC CXK1004L
IC103	8-719-110-78	DIODE RD33ES-B2
IC301	8-759-420-48	IC AN5160NK
IC551	8-759-822-02	IC LA7837
IC801	8-759-982-21	IC RC78L05A
IC802	8-759-982-21	IC RC78L05A

<COIL>

L101	1-410-476-11	INDUCTOR	33UH
L103	1-408-425-00	INDUCTOR	220UH
L104	1-410-482-31	INDUCTOR	100UH
L201	1-410-360-11	INDUCTOR	0.82UH
L205	1-410-473-11	INDUCTOR	18UH
L207	1-410-316-11	INDUCTOR	1UH
L208	1-408-421-00	INDUCTOR	100UH
L209	1-410-322-11	INDUCTOR	3.3UH
L301	1-410-473-11	INDUCTOR	18UH
L302	1-408-420-00	INDUCTOR	82UH
L501	1-410-482-31	INDUCTOR	100UH
L801	1-407-365-00	COIL, CHOKE	
L804	1-459-404-00	COIL (WITH CORE)	
L805 ⚠	1-460-026-11	COIL, HORIZONTAL LINEARITY	
L806 ⚠	1-421-421-21	COIL, CHOKE	
L807	1-410-671-31	INDUCTOR	47UH

<TRANSISTOR>

Q104	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q107	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q110	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q111	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q180	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q201	8-729-201-96	TRANSISTOR 2SC380TM-Y
Q203	8-729-900-89	TRANSISTOR DTC144ES
Q204	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q302	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q304	8-729-900-65	TRANSISTOR DTA144ES
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK
Q802	8-729-809-41	TRANSISTOR 2SD1876-CA
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q804	8-729-831-33	TRANSISTOR 2SD313HP-E
Q805	8-729-820-50	TRANSISTOR 2SA1016KFG

<RESISTOR>

R107	1-247-725-11	CARBON	10K	5%	1/4W	
R108	1-249-429-11	CARBON	10K	5%	1/4W	
R109	1-249-437-11	CARBON	47K	5%	1/4W	
R110	1-247-713-11	CARBON	1K	5%	1/4W	
R117	1-249-430-11	CARBON	12K	5%	1/4W	
R118	1-247-723-11	CARBON	6.8K	5%	1/4W	
R119	1-249-429-11	CARBON	10K	5%	1/4W	
R120	1-249-430-11	CARBON	12K	5%	1/4W	
R121	1-249-433-11	CARBON	22K	5%	1/4W	
R122	1-249-432-11	CARBON	18K	5%	1/4W	
R123	1-249-433-11	CARBON	22K	5%	1/4W	
R124	1-249-433-11	CARBON	22K	5%	1/4W	
R128	1-249-429-11	CARBON	10K	5%	1/4W	
R129	1-249-433-11	CARBON	22K	5%	1/4W	
R130	1-249-434-11	CARBON	27K	5%	1/4W	
R131	1-247-889-00	CARBON	270K	5%	1/4W	
R132	1-249-430-11	CARBON	12K	5%	1/4W	
R133	1-249-417-11	CARBON	1K	5%	1/4W	
R134	1-249-437-11	CARBON	47K	5%	1/4W	
R136	1-249-417-11	CARBON	1K	5%	1/4W	
R137	1-249-417-11	CARBON	1K	5%	1/4W	
R138	1-247-700-11	CARBON	100	5%	1/4W	
R143	1-249-421-11	CARBON	2.2K	5%	1/4W	
R144	1-215-900-11	METAL OXIDE	22K	5%	2W	F
R146	1-249-413-11	CARBON	470	5%	1/4W	
R147	1-247-713-11	CARBON	1K	5%	1/4W	
R148	1-247-713-11	CARBON	1K	5%	1/4W	
R149	1-247-883-00	CARBON	150K	5%	1/4W	
R150	1-249-421-11	CARBON	2.2K	5%	1/4W	

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R151	1-247-708-11	CARBON	470	5%	1/4W	
R152	1-249-413-11	CARBON	470	5%	1/4W	
R153	1-249-413-11	CARBON	470	5%	1/4W	
R154	1-249-413-11	CARBON	470	5%	1/4W	
R155	1-249-413-11	CARBON	470	5%	1/4W	
R156	1-249-413-11	CARBON	470	5%	1/4W	
R157	1-249-413-11	CARBON	470	5%	1/4W	
R158	1-249-413-11	CARBON	470	5%	1/4W	
R159	1-247-712-11	CARBON	820	5%	1/4W	
R160	1-249-429-11	CARBON	10K	5%	1/4W	
R161	1-249-429-11	CARBON	10K	5%	1/4W	
R162	1-249-429-11	CARBON	10K	5%	1/4W	
R163	1-249-413-11	CARBON	470	5%	1/4W	
R166	1-249-419-11	CARBON	1.5K	5%	1/4W	
R171	1-247-725-11	CARBON	10K	5%	1/4W	
R172	1-249-439-11	CARBON	68K	5%	1/4W	
R180	1-249-418-11	CARBON	1.2K	5%	1/4W	
R181	1-249-413-11	CARBON	470	5%	1/4W	
R182	1-249-425-11	CARBON	4.7K	5%	1/4W	
R183	1-249-418-11	CARBON	1.2K	5%	1/4W	
R184	1-249-431-11	CARBON	15K	5%	1/4W	
R201	1-249-403-11	CARBON	68	5%	1/4W	
R203	1-249-410-11	CARBON	270	5%	1/4W	
R204	1-249-418-11	CARBON	1.2K	5%	1/4W	
R206	1-249-402-11	CARBON	56	5%	1/4W	
R207	1-249-411-11	CARBON	330	5%	1/4W	
R208	1-249-465-11	CARBON	47K	5%	1/4W	
R209	1-249-433-11	CARBON	22K	5%	1/4W	
R210	1-249-434-11	CARBON	27K	5%	1/4W	
R211	1-249-414-11	CARBON	560	5%	1/4W	
R212	1-249-405-11	CARBON	100	5%	1/4W	
R213	1-249-429-11	CARBON	10K	5%	1/4W	
R214	1-249-459-11	CARBON	12K	5%	1/4W	
R215	1-249-430-11	CARBON	12K	5%	1/4W	
R216	1-249-441-11	CARBON	100K	5%	1/4W	
R230	1-249-401-11	CARBON	47	5%	1/4W	
R231	1-249-417-11	CARBON	1K	5%	1/4W	
R232	1-249-413-11	CARBON	470	5%	1/4W	
R233	1-249-416-11	CARBON	820	5%	1/4W	
R301	1-249-419-11	CARBON	1.5K	5%	1/4W	
R302	1-249-410-11	CARBON	270	5%	1/4W	
R303	1-249-413-11	CARBON	470	5%	1/4W	
R305	1-249-409-11	CARBON	220	5%	1/4W	
R306	1-247-897-11	CARBON	560K	5%	1/4W	
R307	1-249-417-11	CARBON	1K	5%	1/4W	
R308	1-247-710-11	CARBON	560	5%	1/4W	
R310	1-249-417-11	CARBON	1K	5%	1/4W	
R311	1-249-417-11	CARBON	1K	5%	1/4W	
R312	1-249-417-11	CARBON	1K	5%	1/4W	
R313	1-249-409-11	CARBON	220	5%	1/4W	
R314	1-249-409-11	CARBON	220	5%	1/4W	
R315	1-249-409-11	CARBON	220	5%	1/4W	
R316	1-249-405-11	CARBON	100	5%	1/4W	
R317	1-249-417-11	CARBON	1K	5%	1/4W	
R318	1-247-881-00	CARBON	120K	5%	1/4W	
R319	1-247-903-00	CARBON	1M	5%	1/4W	
R320	1-249-417-11	CARBON	1K	5%	1/4W	
R321	1-247-887-00	CARBON	220K	5%	1/4W	
R322	1-247-899-11	CARBON	680K	5%	1/4W	
R324	1-247-895-00	CARBON	470K	5%	1/4W	
R331	1-216-428-00	METAL OXIDE	180	5%	1W	F
R335	1-247-721-11	CARBON	4.7K	5%	1/4W	
R336	1-249-439-11	CARBON	68K	5%	1/4W	
R369	1-247-710-11	CARBON	560	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R501	1-249-459-11	CARBON	12K	5%	1/4W	F
R503	1-249-419-11	CARBON	1.5K	5%	1/4W	
R504	1-249-417-11	CARBON	1K	5%	1/4W	
R505	1-249-417-11	CARBON	1K	5%	1/4W	
R506	1-249-461-11	CARBON	18K	5%	1/4W	
R507	1-247-706-11	CARBON	330	5%	1/4W	
R509	1-249-432-11	CARBON	18K	5%	1/4W	
R510	1-249-407-11	CARBON	150	5%	1/4W	
R551	1-249-433-11	CARBON	22K	5%	1/4W	
R553	1-216-373-11	METAL OXIDE	2.2	5%	2W	F
R554	1-249-435-11	CARBON	33K	5%	1/4W	
R556	1-249-431-11	CARBON	15K	5%	1/4W	
R557	1-249-417-11	CARBON	1K	5%	1/4W	
R558	1-249-435-11	CARBON	33K	5%	1/4W	
R559	1-215-889-00	METAL OXIDE	330	5%	2W	F
R561	1-249-417-11	CARBON	1K	5%	1/4W	
R563	1-247-726-11	CARBON	33K	5%	1/4W	
R566	1-249-385-11	CARBON	2.2	5%	1/4W	F
R567	1-249-439-11	CARBON	68K	5%	1/4W	
R801	1-247-706-11	CARBON	330	5%	1/4W	
R805	1-249-431-11	CARBON	15K	5%	1/4W	
R806	1-249-389-11	CARBON	4.7	5%	1/4W	F
R807	1-215-453-00	METAL	22K	1%	1/6W	
R808	1-214-754-00	METAL	11K	1%	1/4W	
R809	1-249-383-11	CARBON	1.5	5%	1/4W	F
R810	1-216-425-11	METAL OXIDE	56	5%	1W	F
R811	1-249-426-11	CARBON	5.6K	5%	1/4W	F
R812	1-214-783-00	METAL	180K	1%	1/4W	
R815	1-247-712-11	CARBON	820	5%	1/4W	F
R818	1-207-615-00	WIREWOUND	0.33	10%	2W	F
R819	1-215-882-00	METAL OXIDE	22	5%	2W	F
R820	1-215-895-11	METAL OXIDE	3.3K	5%	2W	F
⊠R822 ⚠		METAL			1/4W	
R823	1-249-377-11	CARBON	0.47	5%	1/4W	F
R824	1-249-377-11	CARBON	0.47	5%	1/4W	F
R831	1-215-888-00	METAL OXIDE	220	5%	2W	F
R832	1-216-426-11	METAL OXIDE	82	5%	1W	F
R834	1-247-711-11	CARBON	680	5%	1/4W	F
R835	1-249-391-11	CARBON	6.8	5%	1/4W	F
R836	1-247-705-11	CARBON	270	5%	1/4W	
R837	1-215-860-11	METAL OXIDE	33	5%	1W	F
R838	1-249-447-11	CARBON	1	5%	1/4W	F
R839	1-247-713-11	CARBON	1K	5%	1/4W	F
R842	1-247-887-00	CARBON	220K	5%	1/4W	
R850	1-249-421-11	CARBON	2.2K	5%	1/4W	

<VARIABLE RESISTOR>

RV101	1-228-991-00	RES, ADJ, CARBON 2.2K
RV212	1-228-994-00	RES, ADJ, CARBON 10K
RV301	1-228-991-00	RES, ADJ, CARBON 2.2K
RV551	1-228-996-00	RES, ADJ, CARBON 47K

<SWITCH>

S551	1-554-186-00	SWITCH, LEVER
S801	1-554-186-00	SWITCH, LEVER

<TRANSFORMER>

T202	1-404-744-11	COIL, IF
T203	1-404-769-11	COIL
T801 ⚠	1-437-195-21	TRANSFORMER, HORIZONTAL DRIVE
T802 ⚠	1-439-476-11	TRANSFORMER ASSY, FLYBACK

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REF.NO.	PART NO.	DESCRIPTION				REMARK
		<TUNER>				
TU101⚠	1-465-298-11	TUNER UNIT (BTP-3A401)				
		<CRYSTAL>				
X101	1-577-082-11	VIBRATOR, CERAMIC				
X301	1-567-505-11	OSCILLATOR, CRYSTAL				
		**********				
	*A-1296-701-A	A1 BOARD, COMPLETE				
		**********				
	1-506-467-11	PIN, CONNECTOR 2P				
	*1-565-484-11	CONNECTOR, BOARD TO BOARD 8P				
		<CAPACITOR>				
C1401	1-124-584-00	ELECT	100MF	20%	10V	
C1402	1-126-157-11	ELECT	10MF	20%	10V	
C1403	1-124-584-00	ELECT	100MF	20%	10V	
C1406	1-124-234-00	ELECT	22MF	20%	16V	
C1407	1-124-234-00	ELECT	22MF	20%	16V	
C1430	1-124-438-00	ELECT	1MF	20%	50V	
		<DIODE>				
D1401	8-719-911-19	DIODE 1SS119				
D1406	8-719-911-19	DIODE 1SS119				
D1408	8-719-110-12	DIODE RD9.1ES-B1				
		<IC>				
IC1401	8-759-140-66	IC UPD4066BC				
		<JACK>				
J1401	1-563-303-41	JACK BLOCK, PIN 2P				
		<TRANSISTOR>				
Q1401	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1403	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1404	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1406	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1407	8-729-900-89	TRANSISTOR DTC144ES				
Q1408	8-729-900-89	TRANSISTOR DTC144ES				
		<RESISTOR>				
R1401	1-247-104-00	CARBON	75	5%	1/4W	
R1402	1-249-415-11	CARBON	680	5%	1/4W	
R1403	1-249-411-11	CARBON	330	5%	1/4W	
R1404	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1405	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1406	1-249-435-11	CARBON	33K	5%	1/4W	
R1407	1-249-441-11	CARBON	100K	5%	1/4W	
R1408	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1411	1-249-411-11	CARBON	330	5%	1/4W	
R1413	1-249-411-11	CARBON	330	5%	1/4W	
R1430	1-247-903-00	CARBON	1M	5%	1/4W	
R1431	1-249-437-11	CARBON	47K	5%	1/4W	
R1432	1-249-441-11	CARBON	100K	5%	1/4W	
R1433	1-249-441-11	CARBON	100K	5%	1/4W	
R1434	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1435	1-249-405-11	CARBON	100	5%	1/4W	
R1436	1-249-405-11	CARBON	100	5%	1/4W	
R1437	1-249-417-11	CARBON	1K	5%	1/4W	
R1438	1-249-429-11	CARBON	10K	5%	1/4W	
R1445	1-249-441-11	CARBON	100K	5%	1/4W	
		**********				
	*A-1316-095-A	G BOARD, COMPLETE				
		**********				
	*1-506-348-99	PIN, CONNECTOR 3P				
	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P				
	*1-533-189-11	HOLDER, FUSE				
	*1-564-506-11	PLUG, CONNECTOR 3P				
	*1-564-510-11	PLUG, CONNECTOR 7P				
	*4-341-751-01	EYELET				
		<CAPACITOR>				
C600	1-161-742-00	CERAMIC	0.0022MF	20%	125V	
C601 ⚠	1-125-392-11	ELECT(BLOCK)	220MF	20%	200V	
C602 ⚠	1-130-680-51	FILM	0.1MF	20%	125V	
C603	1-162-115-00	CERAMIC	330PF	10%	2KV	
C604	1-106-379-12	MYLAR	0.033MF	10%	100V	
C605	1-123-875-11	ELECT	10MF	20%	50V	
C606	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C607	1-125-499-11	ELECT(BLOCK)	220MF	20%	200V	
C609	1-126-105-11	ELECT	1000MF	20%	35V	
C611	1-124-479-11	ELECT	330MF	20%	25V	
C612	1-136-601-11	FILM	0.01MF	5%	630V	
C613	1-102-244-00	CERAMIC	220PF	10%	500V	
C616 ⚠	1-162-599-51	CERAMIC	0.0047MF	20%	400V	
C617 ⚠	1-162-599-51	CERAMIC	0.0047MF	20%	400V	
C620	1-162-135-11	CERAMIC	560PF	10%	2KV	
C624	1-102-212-00	CERAMIC	820PF	10%	500V	
C626	1-102-038-00	CERAMIC	0.001MF		500V	
C627 ⚠	1-162-679-11	CERAMIC	0.0022MF	20%	125V	
C628	1-126-103-11	ELECT	470MF	20%	16V	
C631 ⚠	1-162-679-11	CERAMIC	0.0022MF	20%	125V	
C632	1-161-754-00	CERAMIC	0.001MF	10%	3KV	
C634	1-124-472-11	ELECT	470MF	20%	10V	
C635	1-101-004-00	CERAMIC	0.01MF		50V	
		<DIODE>				
D601 ⚠	8-719-311-72	DIODE RBV-406H-01				
D602	8-719-976-64	DIODE RGP02-17				
D603	8-719-312-61	DIODE EU-1Z				
D604	8-719-312-61	DIODE EU-1Z				
D605	8-719-312-61	DIODE EU-1Z				
D606	8-719-300-33	DIODE RU-3AM				
D607	8-719-300-33	DIODE RU-3AM				
D608	8-719-901-58	DIODE RGP15J				
D612	8-719-109-89	DIODE RD5.6ES-B2				
		<FUSE>				
F601 ⚠	1-532-748-11	FUSE, GLASS TUBE 6.3A/125V				
F602 ⚠	1-532-737-11	FUSE, GLASS TUBE 0.5A/125V				

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REF.NO.	PART NO.	DESCRIPTION				REMARK
		<IC>				
IC601⚠	8-749-921-06	IC STR53041				
		<COIL>				
L601⚠	1-424-115-11	TRANSFORMER, LINE FILTER				
L604	1-410-397-21	FERRITE BEAD INDUCTOR				
L605	1-410-397-21	FERRITE BEAD INDUCTOR				
L608	1-410-397-21	FERRITE BEAD INDUCTOR				
L609	1-410-671-31	INDUCTOR	47UH			
L610	1-410-663-31	INDUCTOR	10UH			
L611	1-410-397-21	FERRITE BEAD INDUCTOR				
L612	1-410-397-21	FERRITE BEAD INDUCTOR				
		<TRANSISTOR>				
Q607	8-729-140-97	TRANSISTOR 2SB734-34				
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q609	8-729-140-96	TRANSISTOR 2SD774-34				
Q610	8-729-140-96	TRANSISTOR 2SD774-34				
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R600	1-202-727-00	SOLID	4.7M	10%	1/2W	
R601⚠	1-205-689-11	WIREWOUND	1	5%	10W	F
R602⚠	1-215-903-51	METAL OXIDE	68K	5%	2W	F
R603	1-215-927-00	METAL OXIDE	47K	5%	3W	F
R604	1-249-396-11	CARBON	18	5%	1/4W	
R605	1-249-397-11	CARBON	22	5%	1/4W	
R614	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R615	1-247-700-11	CARBON	100	5%	1/4W	F
R616	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
⊠R617⚠		CARBON			1/4W	F
R619	1-247-690-11	CARBON	15	5%	1/4W	F
R625	1-249-443-11	CARBON	0.47	5%	1/4W	F
R626	1-249-443-11	CARBON	0.47	5%	1/4W	F
R627	1-249-377-11	CARBON	0.47	5%	1/4W	F
R628	1-249-441-11	CARBON	100K	5%	1/4W	
R629	1-249-433-11	CARBON	22K	5%	1/4W	
R631	1-247-889-00	CARBON	270K	5%	1/4W	
R633	1-249-423-11	CARBON	3.3K	5%	1/4W	
R636	1-249-443-11	CARBON	0.47	5%	1/4W	F
R637	1-249-429-11	CARBON	10K	5%	1/4W	
R638	1-216-469-11	METAL OXIDE	12	5%	3W	F
R640	1-249-409-11	CARBON	220	5%	1/4W	
R641	1-249-421-11	CARBON	2.2K	5%	1/4W	
R642	1-249-425-11	CARBON	4.7K	5%	1/4W	
R645	1-249-414-11	CARBON	560	5%	1/4W	F
		<TRANSFORMER>				
T601⚠	1-449-832-11	TRANSFORMER				
		<THERMISTOR>				
THP601⚠	1-800-686-43	THERMISTOR (POSITIVE)				

****

*A-1330-998-A C BOARD, COMPLETE
****

*1-564-509-11 PLUG, CONNECTOR 6P
*1-564-510-11 PLUG, CONNECTOR 7P
*3-710-578-01 COVER, VOLUME, 6 MOLD

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C701	1-162-116-00	CERAMIC	680PF	10%	2KV	
C702	1-102-050-00	CERAMIC	0.01MF		500V	
C703	1-162-114-00	CERAMIC	0.0047MF		2KV	
C705	1-102-110-00	CERAMIC	220PF	10%	50V	
C706	1-102-110-00	CERAMIC	220PF	10%	50V	
C707	1-102-110-00	CERAMIC	220PF	10%	50V	
		<JACK>				
J701	1-526-958-21	SOCKET, PICTURE TUBE				
		<COIL>				
L704	1-408-420-00	INDUCTOR	82UH			
		<TRANSISTOR>				
Q701	8-729-326-11	TRANSISTOR 2SC2611				
Q702	8-729-326-11	TRANSISTOR 2SC2611				
Q703	8-729-326-11	TRANSISTOR 2SC2611				
		<RESISTOR>				
R701	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R702	1-202-822-00	SOLID	2.2K	10%	1/2W	
R704	1-249-409-11	CARBON	220	5%	1/4W	F
R705	1-249-418-11	CARBON	1.2K	5%	1/4W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-202-822-00	SOLID	2.2K	10%	1/2W	
R708	1-249-419-11	CARBON	1.5K	5%	1/4W	
R712	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R713	1-202-822-00	SOLID	2.2K	10%	1/2W	
R714	1-249-413-11	CARBON	470	5%	1/4W	
R715	1-249-419-11	CARBON	1.5K	5%	1/4W	
R717	1-202-842-11	SOLID	220K	10%	1/2W	
R718	1-202-719-00	SOLID	1M	10%	1/2W	
R719	1-202-838-00	SOLID	100K	10%	1/2W	
R720	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R721	1-249-405-11	CARBON	100	5%	1/4W	
R722	1-249-405-11	CARBON	100	5%	1/4W	
R723	1-249-405-11	CARBON	100	5%	1/4W	F
R724	1-247-885-00	CARBON	180K	5%	1/4W	
		<VARIABLE RESISTOR>				
RV701	1-228-993-00	RES, ADJ, CARBON 4.7K				
RV702	1-228-989-00	RES, ADJ, CARBON 470				
RV703	1-228-993-00	RES, ADJ, CARBON 4.7K				
RV704	1-228-989-00	RES, ADJ, CARBON 470				
RV705	1-228-993-00	RES, ADJ, CARBON 4.7K				
RV706	1-228-995-00	RES, ADJ, CARBON 22K				

****

*1-632-101-11 H1 BOARD
****

<IC>

IC051 8-749-900-36 IC BX-1393

H1 H2 H3 Y1

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R052	1-249-409-11	CARBON	220	5% 1/4W	
		**********			
	*1-632-107-11	H2 BOARD			
		********			
	*4-358-502-00	HOLDER, LED			
		<CAPACITOR>			
C001	1-161-377-00	CERAMIC	0.0047MF	30% 16V	
C002	1-161-377-00	CERAMIC	0.0047MF	30% 16V	
		<DIODE>			
D001	8-719-812-41	DIODE TLR124			
D002	8-719-938-68	DIODE GL3HY8			
D003	8-719-812-41	DIODE TLR124			
D010	8-719-109-96	DIODE RD6.8ES-B1			
D011	8-719-109-96	DIODE RD6.8ES-B1			
D012	8-719-110-17	DIODE RD10ES-B2			
D013	8-719-109-96	DIODE RD6.8ES-B1			
		<RESISTOR>			
R001	1-249-418-11	CARBON	1.2K	5% 1/4W	
R002	1-249-405-11	CARBON	100	5% 1/4W	
R003	1-249-413-11	CARBON	470	5% 1/4W	
		<SWITCH>			
S001	1-554-174-00	SWITCH, KEY BOARD			
S002	1-554-174-00	SWITCH, KEY BOARD			
S003	1-554-174-00	SWITCH, KEY BOARD			
S004	1-554-174-00	SWITCH, KEY BOARD			
S005	1-554-174-00	SWITCH, KEY BOARD			
S007	1-554-174-00	SWITCH, KEY BOARD			
S008	1-554-174-00	SWITCH, KEY BOARD			
		**********			
	*A-1375-084-A	H3 BOARD, COMPLETE			
		**********			
	*1-506-467-11	PIN, CONNECTOR 2P			
	*1-506-468-11	PIN, CONNECTOR 3P			
	*3-710-578-01	COVER, VOLUME, 6 MOLD			
		<FILTER>			
BPF001	1-235-171-00	FILTER, BAND PASS			
CF001	1-567-097-61	FILTER, CERAMIC			
CF002	1-567-097-61	FILTER, CERAMIC			
		<CAPACITOR>			
C001	1-102-960-00	CERAMIC	24PF	5% 50V	
C002	1-102-960-00	CERAMIC	24PF	5% 50V	
C003	1-126-157-11	ELECT	10MF	20% 10V	
C004	1-101-001-00	CERAMIC	0.001MF	50V	
C006	1-126-160-11	ELECT	1MF	20% 50V	
C007	1-101-004-00	CERAMIC	0.01MF	50V	
C008	1-126-094-11	ELECT	4.7MF	20% 16V	
C009	1-126-094-11	ELECT	4.7MF	20% 16V	
C010	1-126-157-11	ELECT	10MF	20% 10V	
C011	1-101-005-00	CERAMIC	0.022MF	50V	
C012	1-126-160-11	ELECT	1MF	20% 50V	
C013	1-136-165-00	FILM	0.1MF	5% 50V	
C014	1-126-157-11	ELECT	10MF	20% 10V	
C015	1-136-165-00	FILM	0.1MF	5% 50V	
C016	1-124-242-00	ELECT	33MF	20% 16V	
C017	1-136-165-00	FILM	0.1MF	5% 50V	
C019	1-101-880-00	CERAMIC	47PF	5% 50V	
		<VARIABLE CAPACITOR>			
CV001	1-151-668-11	CAP, VARIABLE			
		<IC>			
IC001	8-752-035-29	IC CXA1019S			
		<JACK>			
J001	*1-568-547-11	JACK, MINIATUER PIN			
		<COIL>			
L001	1-459-776-11	COIL (WITH CORE)			
L002	1-459-776-11	COIL (WITH CORE)			
L003	1-410-316-11	INDUCTOR	1UH		
		<TRANSISTOR>			
Q001	8-729-900-89	TRANSISTOR DTC144ES			
Q002	8-729-900-61	TRANSISTOR DTA114ES			
		<RESISTOR>			
R001	1-249-422-11	CARBON	2.7K	5% 1/4W	
R002	1-249-409-11	CARBON	220	5% 1/4W	
R003	1-249-410-11	CARBON	270	5% 1/4W	
R004	1-249-421-11	CARBON	2.2K	5% 1/4W	
R005	1-249-429-11	CARBON	10K	5% 1/4W	
R006	1-249-413-11	CARBON	470	5% 1/4W	
R007	1-249-415-11	CARBON	680	5% 1/4W	
R008	1-249-405-11	CARBON	100	5% 1/4W	
		<VARIABLE RESISTOR>			
RV001	1-228-996-00	RES, ADJ, CARBON 47K			
		**********			
	*1-632-104-11	Y1 BOARD			
		********			
	*1-564-506-11	PLUG, CONNECTOR 3P			
		<JACK>			
J1001	1-563-933-21	JACK, MINIATURE (DIA. 3.5)			
		<RESISTOR>			
R1001	1-247-743-11	CARBON	220	5% 1/2W	
R1002	1-247-743-11	CARBON	220	5% 1/2W	
		**********			

Y

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
	*A-1394-220-A	Y BOARD, COMPLETE				
		**********				
	*1-564-505-11	PLUG, CONNECTOR 2P				
	*1-564-506-11	PLUG, CONNECTOR 3P				
	*1-565-491-11	CONNECTOR, BOARD TO BOARD 15P				
		<CAPACITOR>				
C251	1-124-902-00	ELECT	0.47MF	20%	50V	
C252	1-124-893-11	ELECT	2200MF	20%	10V	
C253	1-124-902-00	ELECT	0.47MF	20%	50V	
C254	1-130-487-00	MYLAR	0.022MF	5%	50V	
C258	1-124-910-11	ELECT	47MF	20%	50V	
C261	1-124-478-11	ELECT	100MF	20%	25V	
C262	1-124-478-11	ELECT	100MF	20%	25V	
C263	1-124-484-11	ELECT	220MF	20%	35V	
C264	1-124-480-11	ELECT	470MF	20%	25V	
C265	1-130-495-00	MYLAR	0.1MF	5%	50V	
C266	1-124-902-00	ELECT	0.47MF	20%	50V	
C269	1-130-471-00	MYLAR	0.001MF	10%	50V	
C270	1-123-382-00	ELECT	3.3MF	20%	50V	
C271	1-123-382-00	ELECT	3.3MF	20%	50V	
C272	1-123-382-00	ELECT	3.3MF	20%	50V	
C273	1-124-910-11	ELECT	47MF	20%	50V	
C274	1-102-074-00	CERAMIC	0.001MF	10%	50V	
		<DIODE>				
D251	8-719-911-19	DIODE 1SS119				
D252	8-719-911-19	DIODE 1SS119				
		<IC>				
IC251	8-759-822-03	IC LA4275				
IC252	8-759-710-40	IC NJM2234D				
IC253	8-759-145-27	IC UPC1406HA				
		<COIL>				
L251	1-407-503-00	INDUCTOR	8.2MMH			
		<TRANSISTOR>				
Q251	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q252	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q253	8-729-115-10	TRANSISTOR 2SK105A-10				
Q254	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R252	1-247-895-00	CARBON	470K	5%	1/4W	
R253	1-249-429-11	CARBON	10K	5%	1/4W	
R259	1-249-433-11	CARBON	22K	5%	1/4W	
R260	1-249-408-11	CARBON	180	5%	1/4W	
R261	1-247-711-11	CARBON	680	5%	1/4W	
R262	1-247-713-11	CARBON	1K	5%	1/4W	
R263	1-249-451-11	CARBON	2.2	5%	1/4W	F
R264	1-247-895-00	CARBON	470K	5%	1/4W	
R266	1-249-435-11	CARBON	33K	5%	1/4W	
R267	1-249-437-11	CARBON	47K	5%	1/4W	
R271	1-249-433-11	CARBON	22K	5%	1/4W	
R272	1-249-433-11	CARBON	22K	5%	1/4W	
R273	1-249-429-11	CARBON	10K	5%	1/4W	
R416	1-249-417-11	CARBON	1K	5%	1/4W	
		<CONNECTOR>				
Y3	*1-564-506-11	PLUG, CONNECTOR 3P				
		**********				
		MISCELLANEOUS				
		**********				
	⚠1-417-184-11	SELECTOR, ANTENNA				
	⚠1-426-462-11	COIL, DEMAGNETIZATION				
	⚠1-451-354-11	DEFLECTION YOKE (Y11SLA)				
	1-452-032-00	MAGNET, DISK; 10MM ϕ				
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ				
	1-452-512-11	MAGNET				
	1-503-918-11	SPEAKER				
	⚠1-559-396-11	CORD, POWER				
	* 1-575-164-11	CABLE,PIN				
V901	⚠8-735-821-05	PICTURE TUBE (A27KGC10X)				
		**********				
		ACCESSORIES AND PACKING MATERIALS				
		**********				
	PART NO.	DESCRIPTION				REMARK
	1-465-304-11	REMOTE COMMANDER (RM-768)				
	1-501-455-11	ANTENNA, TELESCOPIC				
	*3-704-302-01	BAG (STANDARD), PROTECTION				
	3-750-920-21	MANUAL, INSTRUCTION				
	*4-396-542-01	INDIVIDUAL CARTON				
	*4-396-543-01	CUSHION (LOWER) (ASSY)				
	*4-396-544-01	CUSHION (UPPER) (ASSY)				

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9-964-435-01

Sony Corporation
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English
89LH0245-1
Printed in Japan
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